# PHOTO-ERA

**The American Journal of Photography**

**Vol. XIX** **AUGUST, 1907** **No. 2**

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Entered at Post Office, Boston, as second-class matter

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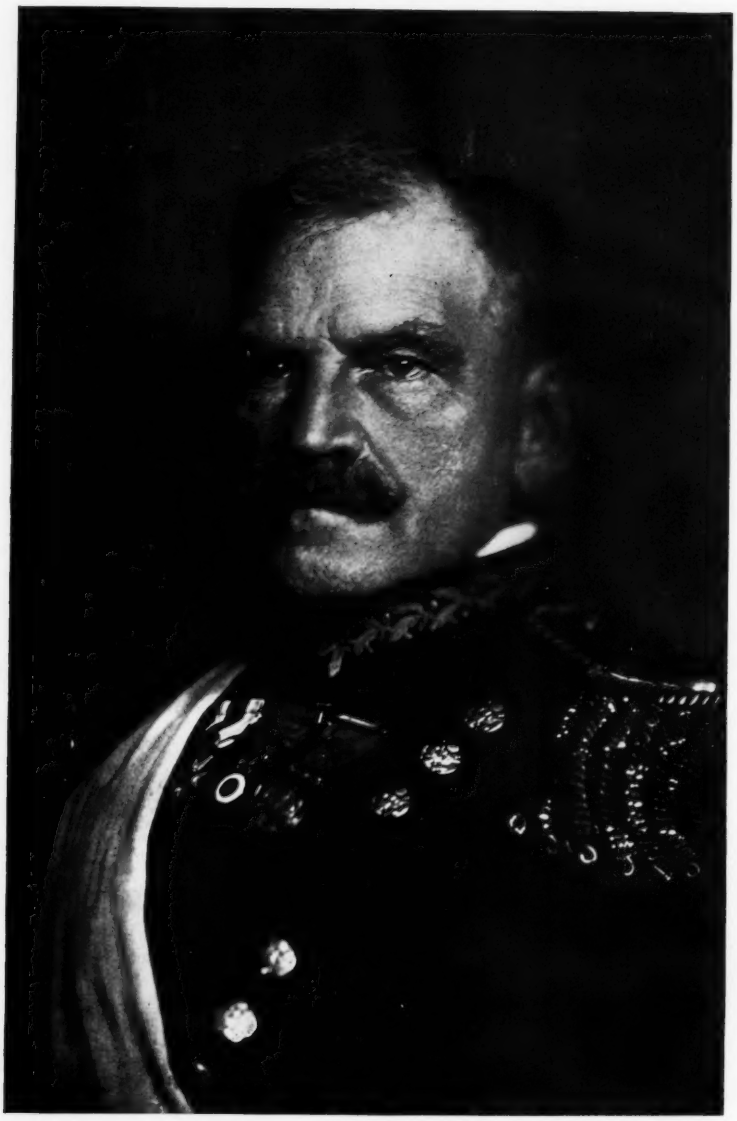

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PIRIE MACDONALD
GENERAL ADNA R. CHAFFEE

PHOTO-ERA
The American Journal of Photography

Vol. XIX. AUGUST, 1907 No. 2

# Psychology in Portraiture

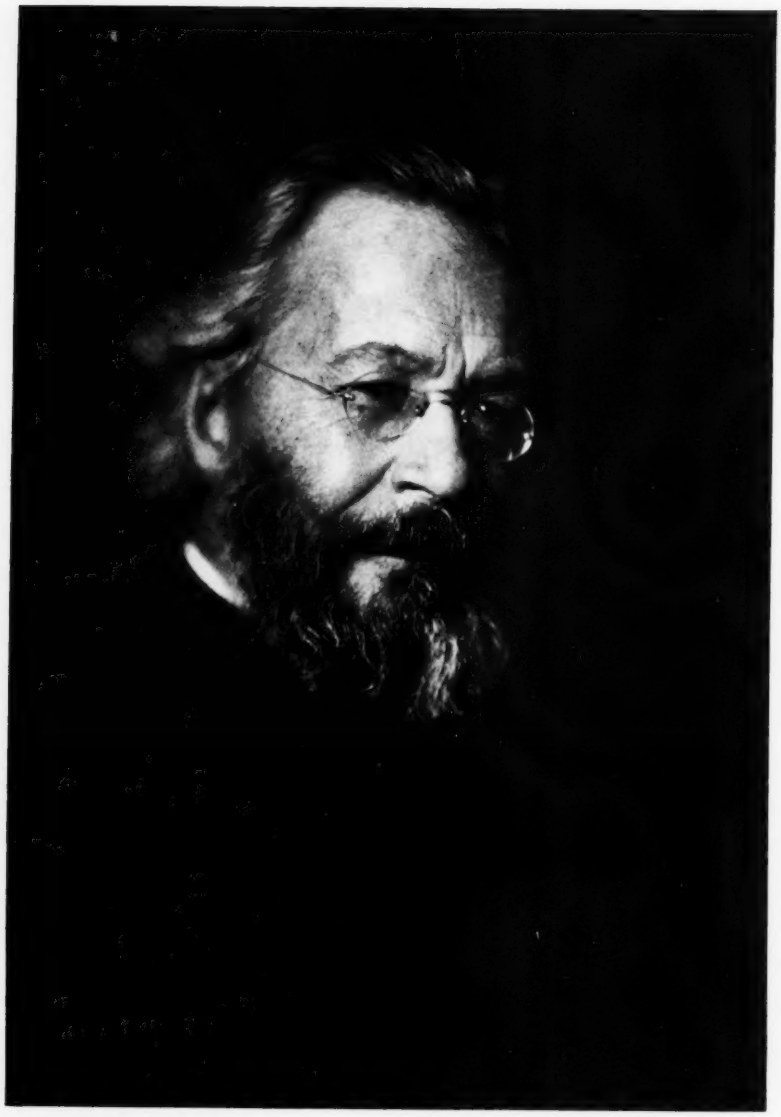
SIDNEY ALLAN

PORTRAITURE, as it is practised to-day, even when at its very best, is nothing but an æsthetic enjoyment for the few who like to see a personality delineated as another personality sees it. The pride and surprise of performance has become the predominant quality, and the note of psychology—the record of the inner life of man in contrast to outward appearance — is lacking.

The painter is too much absorbed in the individuality of brush-work, in the color-scheme and composition, in the effect, perchance, of some passing light, to give due attention to the delineation of character. Of course there are exceptions like Watts, Lenbach and Bastien LePage, who, all three in their own way, undertook to blend character with artistic qualities. But the technique of the painter is inseparable from the conception of his mind, and the stronger his personality is, the more active will his imagination be in the presence of an interesting sitter. He unconsciously will give his own interpretation to the features and forms before him, and the result will be a commentary on them rather than an accurate representation of the same.

Their medium of expression is a too elaborate one, the action of the hand too closely connected with activity of the brain that it could grasp objective phenomena; and the likeness they render is not likeness *per se*, but likeness as seen through a temperament. Many of the leading portrait-painters have realized this deficiency and tried to substitute it by a mechanical registration of facts. They have welcomed the camera as an obliging assistant to overcome the difficulties of actual structure.

Photography is the one medium of pictorial expression which records independently, only the selection of its subjects is under control, but what it is asked to represent it represents mechanically. And it is one of those inexplicable cases of human shortsightedness that the artists of the camera have not recognized the fact that the originality of camera expression is dependent, no, stands or falls, with this one quality of independent registration. Instead of blindly imitating the formula of other arts, they should have recognized that their technical means were capable of a new style of expression.



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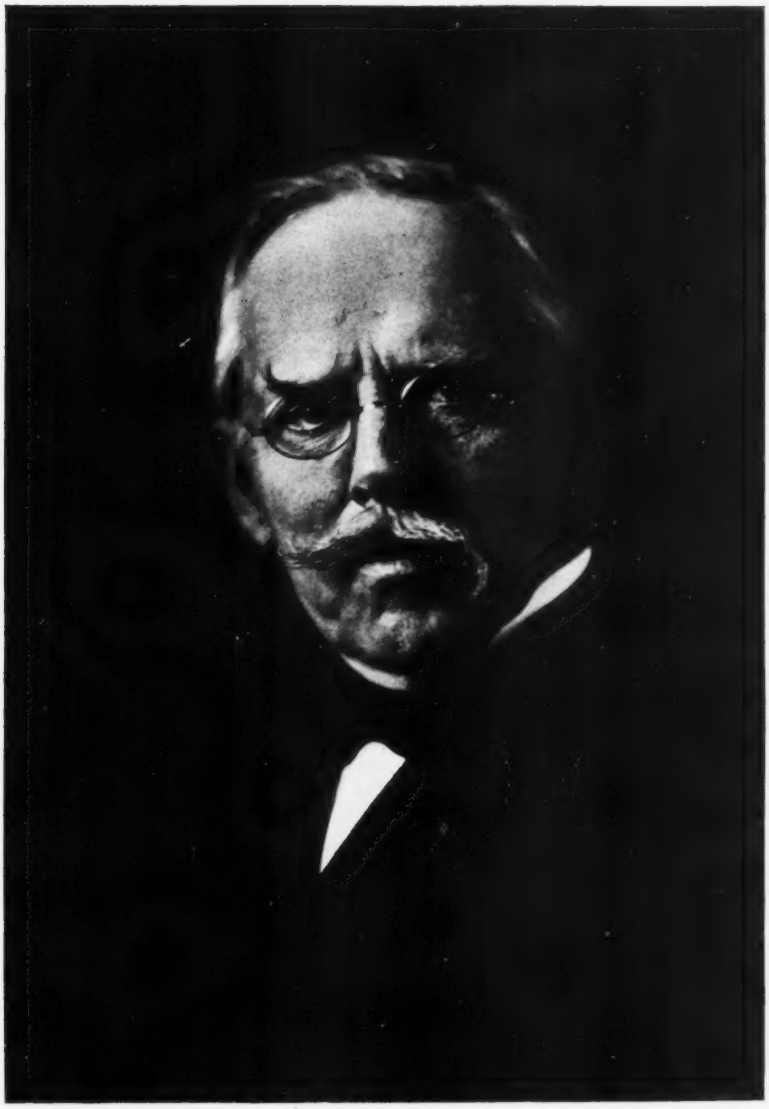
REV. CHARLES H. PARKHURST



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PIRIE MACDONALD
JACOB RIIS

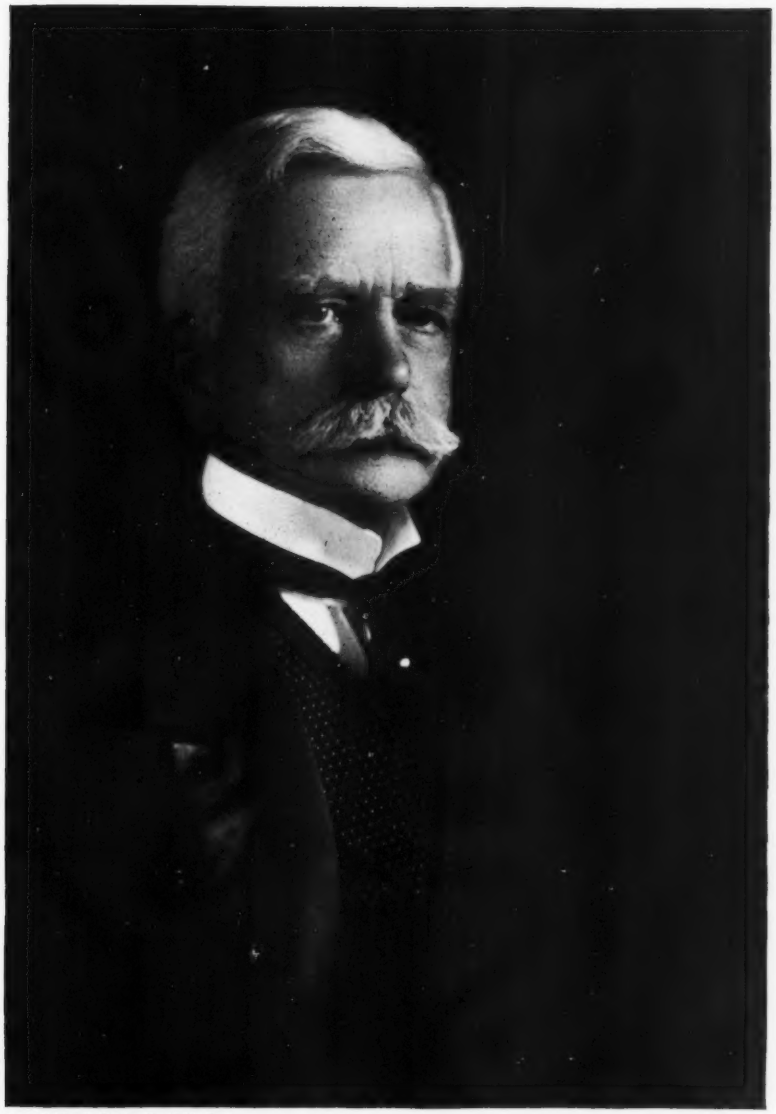
For who can say what a portrait-painter might not accomplish, if he could devote his entire knowledge and all those qualities which constitute genius in a painter to the arrangement, investigation and full comprehension of his subject, leaving the labor of actual representation to a mechanical process of reproduction.

"But a photograph is so matter-of-fact, so bald in appearance!" will be the argument. True, it is matter-of-fact, and this is the sole reason why so many photographers lose themselves in imitative eclecticism, in the endeavor to substitute what their process is lacking. I am not so certain, however, about the baldness of effect. The technique of photography is becoming more fluent and flexible every day, and, barring color, it has a peculiar solidity of dark tints, a richness of tonal gradations, and a faculty to lose form in its background and environment, which compares favorably with other graphic arts. If one approves an etched portrait one has no ground to find fault with a photographic portrait.

The great difficulty at present is that so few men enter the profession who have the necessary faculty for its proper and successful manipulation. Not every man is an appreciator of character and facial expression and at the same time endowed with good taste, pictorial insight and that peculiar patience which the scientific practice of photography demands. Pirie MacDonald is such an exception. He is a man of great intellectual resources, naturally endowed with good taste and a peculiar gift for his profession. He underwent a thorough academic training in order to become more conversant with the technical methods of art and the laws of composition. Few have carried the photographic art to such a pitch as MacDonald. He was a masterly technician from the start. From the time of his first successes at photographic expositions he was hailed, I believe, as a recruit of high value to the camp of artistic photography. He was already in possession of a style. Slowly his style gained in delicacy and assurance, in the faculty to render character in a straightforward, sympathetic manner. Then he became a master of light and shade, and added the poetry of atmosphere to his character delineation. Finally, he carried his style to the highest point by expressing those subtle emotions which might be called the psychological element in art.

His portraits, glanced over *en masse*, have all a certain virility and robustness in common; although at first glance there is a deceptive smoothness, resulting from a perfect technique, about them. His subjects are, of course, such as thousands might have to interpret; but how they reflect each human expression! He gives the exact translation of his thought about a person, without changing the actual resemblance. With him photography has become pure tact of vision.

Two of Pirie MacDonald's recent portraits, which it must have been a delight to interpret — I allude to those of General Chaffee and Russell Sage — show his conception of character. It is evident in the massive and erect head of the one and the arrangement of light which forms the setting of the slim, long face of the other. He enables us to see in the shrewd, wrinkled countenance of Russell Sage all the power of concentrated thought and patient labor that is valuable in the man; and in the face of General Chaffee, he suggests squareness of form, indicative of firmness and manly vigor, by features and form that are perfectly round.



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PIRIE MACDONALD
MARSHALL FIELD

Another brilliant production is the portrait of Rev. Parkhurst. The well-known preacher and reformer is quite a picturesque character, and the photographer expressed it by a more pictorial arrangement. It is shown in the energetic twist of the head and in the usually strong contrasts between the light and shadowy parts. His keen and thoughtful and his absorbed and concentrated gaze gains a deeper significance by this treatment. MacDonald's power of interpretation is also much in evidence in his portrait of Jacob Riis. The sympathetic nature of Roosevelt's "best citizen," his faculty for observation, and his frankness in expressing it are apparent in the simple and genial facial expression. And with what breadth of sympathy and keenness of insight has the photographer depicted the face of Marshall Field, a man of calculation, restless energy and rare organizing-power. The first impression MacDonald received when Mr. Field entered his studio was that of an officer who, with perfect ease of manner, is used to command large masses of people. "Why, he is the merchant-militant," suggested itself to the photographer's mind, and out of this idea he created the portrait which carries out the most familiar phase in Mr. Field's outward appearance.

MacDonald's activity has been confined almost exclusively to portraiture, and, as he was attracted most by character, he has devoted himself in recent years exclusively to the portrayal of men. Laying particular stress upon the beauty of features and those parts of the face that express intellectuality and rare mental gifts, he concentrates all his light upon the eyes and forehead, while the failings and weaknesses of humanity are absorbed in the shadows. For the same reason he seldom attempts standing figures, but prefers the simplicity and directness of the bust portrait without any embellishments and accessories. MacDonald simplifies, but simplifies with taste and unerring precision. What big, sweeping masses of light and shade, and what a shimmer of light upon the faces! He is not imitating the chiaroscuro scheme of any painter or school, but has invented his own method.

My admiration for this distinguished work is such, that I am perhaps in danger of overstating its merits; but it is worth taking into account that to-day, after several years of acquaintance with it, its merits seem more and more to justify enthusiasm. His photographs have the sign of portraits of the first order, and their style alone — I can't call it otherwise — would save them if everything else should change: our measure of the value of resemblance, their expression of character, and the particular association they evoke.

The gift that he possesses he possesses completely — the immediate perception of the final result and the means he can employ. Putting aside the question of the subject (and to a great portrait a common sitter will doubtless not always conduce), the highest result is achieved when to the element of quick perception a certain faculty of lingering reflection is added. I use this term for lack of a better; I mean the quality which enables the artist to see deep into a subject, to absorb it, to discover in it new things that are not on the surface of expression, and to become patient and almost reverent with it — thus elevating and humanizing the pictorial problem.

# A Model Photographic Plant

C. H. CLAUDY

THE photographic laboratory illustrated herewith, and of which the description follows, is not presented as a model for those who wish to construct photographic workrooms; that is, it is not so intended in the concrete; in the abstract, the order, method and arrangement followed in this unique establishment, if copied in the smaller edition which we all either own or hope to own, cannot fail to be of benefit.

The laboratory in question is the one belonging to the United States Geological Survey, where photographic work of all descriptions is carried on with the minimum effort and the maximum output — the smallest expense and waste and the greatest possible per cent of perfect results.

The establishment is not perfect. More room, and a better arrangement, would decidedly improve its facilities, but, with the space at command, the maximum convenience has been attained.

A very important part of the work is copying. Maps, particularly, must frequently be reproduced by photographic means, necessitating a plant of absolute accuracy and large capacity. For this work, two cameras are provided of monster dimensions, taking a plate 28 x 34 inches in size. These cameras are mounted on tracks so as to slide back and forth, and, of course, are instantly lockable in any position. Naturally, to focus such a camera, some other means than the usual must be provided. No workman has arms long enough to reach out from the back to raise or lower the front, or shift the lens from side to side. So these movements are controlled by gearing, through shafts which reach back of the camera within easy handling-distance of the workman under the cloth.

The copying-boards, rigid, perfectly plane and parallel to the camera-fronts, are illuminated by electric lights, no dependence being placed upon variable daylight for work which must always be of the same standard and which may be needed in the greatest kind of a hurry. The lamps — four to a copying-board — can be placed in any required position, being balanced on cords for up-and-down motion, mounted on trolleys overhead for forward-and-back movement and the light being controlled and projected by parabolic reflectors.

The trolley system has been extended to the plate-holders. These heavy and large affairs are entirely too cumbersome for a single workman to handle alone in the ordinary way; so when they are to be moved from dark-room to camera they are suspended from a trolley at the right height, and pushed across the short intervening distance. The plate-holders never enter the dark-room. They fit up close to and completely fill a window in the dark-room, making a light-tight joint. Everything being ready for the exposure, the plate (wet) is prepared in the dark-room, slipped into the plate-holder and the slide dropped. If it is desired to maintain darkness in the dark-room, a slide is drawn across the window. A catch is released, the trolley swings the holder away from the window and over

C. H. CLAUDY MONSTER CAMERAS SLIDING ON TRACKS

*Note plate-holder on trolley, and gearing to lens-board, permitting of adjustments from the rear*

to the camera, where it falls instantly and naturally into place and the exposure is made. The idea of loading these huge plate-holders by means of a trolley and a window saves a great deal of time, extends the efficiency and the working-time of the individual operator and gives him more and better opportunity for doing his best work.

Of course, all the copying-work is not so large. Twelve Cooke lenses, ranging from twenty millimeters to thirty-one inches in focal length, are available for this work, and each, with the exception of those very small ones used in microscopic work only, mounted on its own lens board, will fit any camera in the establishment. No vibration ever interferes with the work of copying, the camera track-beds being of cement, resting on the iron foundation of the building. Beyond this copying-room are some smaller dark-rooms for Velox printing. Here the new tantalum incandescent lights are now used in place of the ordinary carbon filament lamps. These lamps, of twenty-four C. P., are effective, as compared with carbon filament lamps of thirty-two C. P., in the ratio of nine to fifteen, considerably more than twice as bright, photographically speaking. They also light and go out almost instantly, allow of the speediest possible printing of

negatives on gaslight paper consistent with control, have none of the heat and other disadvantages of arc-lights and are generally the most satisfactory illuminating-apparatus possible for this work.

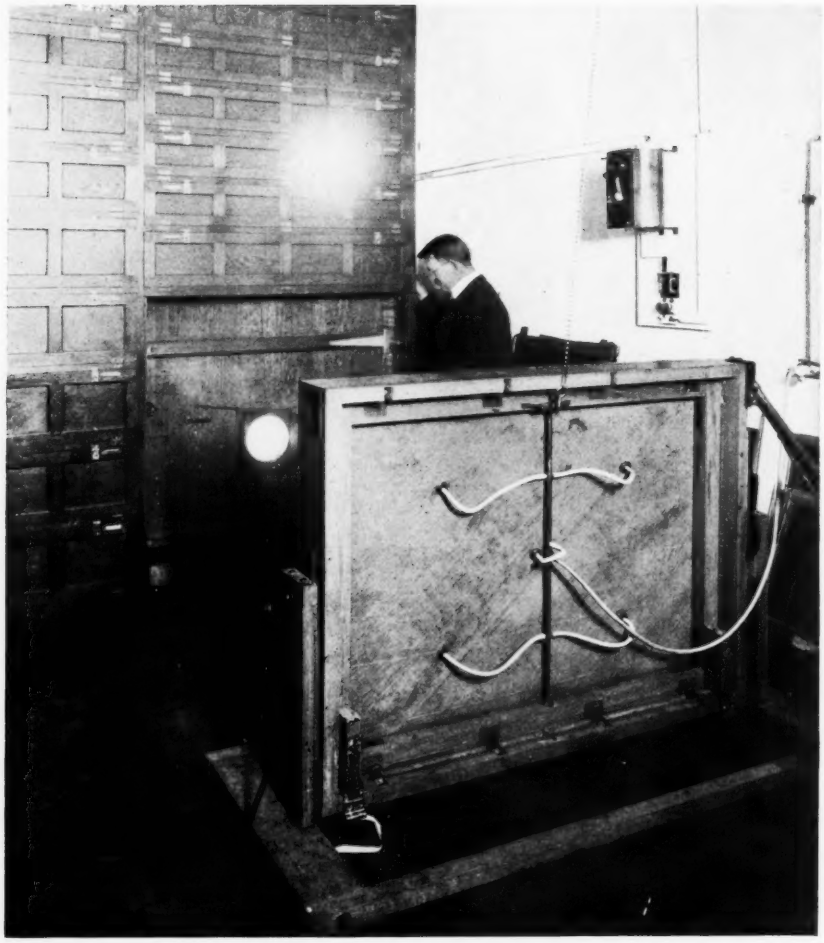
Turning in the other direction, a series of workrooms, headed by the wet-plate dark-room, follows. First is the dark-room, where the coating of the plate is accomplished, and later, the development. Next comes an intensifying-room, then a washing-room, drying-room and lastly a glass-cleaning room, all in a line and so arranged that the plate constantly progresses and does not retrace its steps.

Further down is the printing-room for large work. This is a revelation to the photographer whose wildest dreams have never seen a larger print made than 18 x 22. Here the immense glass plates are printed from, and also the equally large paper negatives, which articles are not infrequently made of maps where the negative is to be preserved, paper negatives serving as well for most work as glass, and having no risk of breakage and small storage-space demands, both considerations worthy of note.

As may be imagined, the problem of getting a sheet of paper to lie in absolute contact with a sheet of glass, or a paper negative resting on glass, 28 x 34 inches, is one not to be solved with the familiar bowed brass springs of the ordinary printing-frame. The printing-frame here used is a pneumatic one — an air-pump exhausting the air between the back of the plate-holder and the paper and negative beneath, which permits of a pressure up to fifteen pounds to the square inch of surface being applied, thus holding the two together in absolute contact during the exposure. Bromide and chloride papers of all kinds are used, including a special paper made for the purpose, which, like a slow plate, gives the greatest possible contrast for line-work and no half-tone. This is what is desired in printing line copies of maps and sketches, which forms a good part of the work done by this laboratory. The exposure is made by opening and closing a shutter which allows a powerful electric light to shine upon the face of the frame for an average time of one-half second. The frame itself is hung in gimbals and can be turned face up for examination, or face down for the work of putting in and taking out the paper and negative or swung perpendicular for the exposure.

Paper is kept in special cases, the closed doors of which are shown in the photograph on the next page. Instant access to any one can be had at all times, without disturbing others, and all are light-tight and damp-proof.

Developing and fixing are done in huge trays, the fixing-tray having a pocket in one end so that the tray may be swung up, on hinges, until it is upright and out of the way, all of the solution being caught and held in the pocket at the lower end. The drying of these enormous prints after a washing in a huge sink by means of a rubber hose and constantly attending to them by hand is accomplished in the cloth shelving shown in the illustration. These drying-racks are made of cloth, wound on a spring roller. When not in use, they are released and roll up against the wall. When wanted, the end is pulled forward and the stick, which passes through the end of the cloth, is hooked between two posts, where it holds

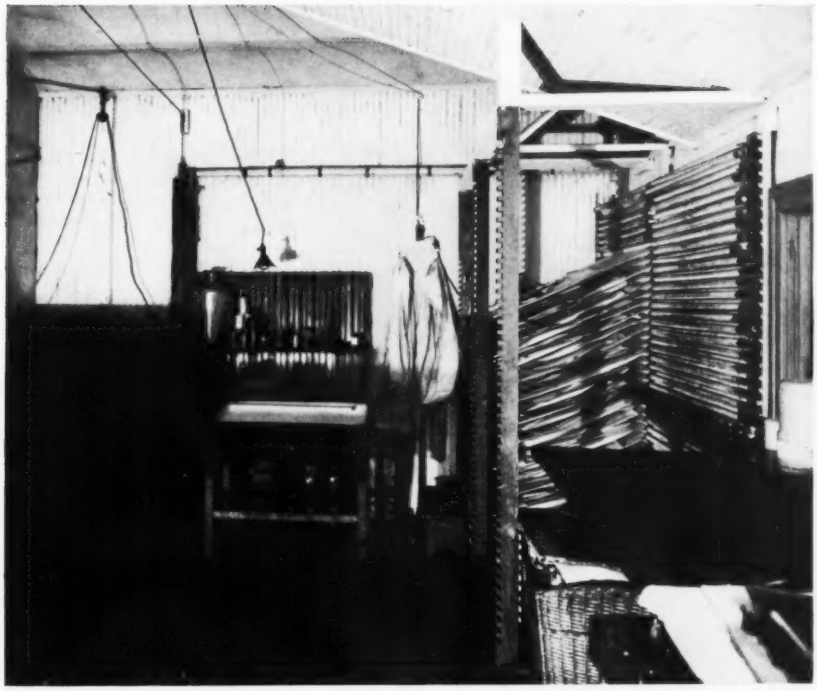


C. H. CLAUDY A PNEUMATIC PRINTING-FRAME

*The round hole is the source of light and the wooden closets contain printing-paper*

the cloth in the form of a slanting shelf of cloth on which the big prints are dried by a constant circulation of air from an electric fan.

Electric fans are all about, too, and so arranged that they do not merely agitate the air in the various rooms, but provide, by means of floor and ceiling openings, the constant ventilation which is essential for comfortable working in any laboratory where chemicals which give off fumes are used, as in the case of wet-plate work.



C. H. CLAUDY WHERE THE BIG PRINTS ARE MADE

*Note cloth drying-racks*

There is an enlarging-room which would delight the heart of any one who has ever tried to make enlargements with makeshift apparatus. Here is a Cooper-Hewitt lamp for illumination, and a specially constructed enlarging-camera. The easel is enormous and will accommodate the largest sheet of enlarging-paper made. It can be turned to any angle, moved backward and forward, tilted sidewise and back and forth. The lens in the camera can be focused by means of a shaft from any position along the bed, so that the operator can get close to the screen and examine the image and do fine focusing with his eye close to the work. This apparatus is in a room especially provided for it, and for nothing else.

The parties of the survey in the field take thousands of photographs. These are all finished here. Mounting, for those that require it, is accomplished by means of the dry mounting-tissue, and one of the cleverest little schemes imaginable makes the work more than simple. A large letterpress was provided with a flat electric heater on the under side of the movable part of the press. The print, trimmed with the tissue under it, is placed in position on the mount and "tacked" down with a momentary pressure of a hand electric-heating iron. The

whole is then put between blotters in the press, the press screwed home, left a second, unscrewed and behold, the mounting is accomplished.

As may be imagined, the storing of the enormous quantity of negatives which are the property of this laboratory is a problem, and particularly in making any negative instantly accessible. To this end there is in course of making at the present time a set of reference-books, which have the photographs arranged by subjects. A card index will cross by means of locality. Another set of books has all the work of individual field workers, and a second index will have a cross on the first two by means of dates. With dates, men, localities and subjects, any individual photograph can be found at a moment's notice, and the number attached will make the negative available on the next instant.

There are other and smaller laboratories attached to and part of what has been described. There is a private chemical laboratory where the director of the whole can carry out individual work, tests, etc. There are a number of admirably arranged dark-rooms for various purposes — all, it may be said, the most convenient, both as to arrangement and ventilation, which can be conceived. There is a department where nothing but photographs of fossils are made, and another where rock sections are photomicrographed. Such subjects can only be touched upon lightly and indicated, in a story of this length and scope.

It should interest many to know that almost without exception the apparatus has been made by Folmer and Schwing after designs of Mr. N. W. Carkhuff, formerly head of this laboratory and now a valued chemist with the Eastman Kodak Co. Mr. Carkhuff indicated what he wanted and gave his ideas, Mr. Folmer enlarged and changed them, and together they worked out the present system of cameras and apparatus which work to such great efficiency and with the minimum of effort and time expended.

It is interesting to note that no separate appropriation is made for the maintenance of this, the finest and best-equipped photographic laboratory of the government, if not in the United States. The various departments of the Survey pay each their *pro rata* share from strict accounts kept of the work which is charged against them. Thirteen men are constantly at work here, which should be some indication of the amount of work done; for thirteen men, with all possible conveniences, can do a great deal of work in a day — multiplied by three hundred and sixty-five, the output in photographs reaches a staggering total.

No work but the best is allowed or considered, it being rightly thought that it is much cheaper to "waste" paper and plates, and get a thing right, than send it out wrong for an artist to do over. Not that there is very much "wasting" of any kind going on, the entire force being highly skilled in photography in general and the work they each have to do in particular.

Visitors with a reason for their visit would probably be welcomed; the general public is strictly excluded; indeed, the general public, and even the photographic public, are hardly aware there is such an institution in existence. It is hoped that after the publication of this article that last phrase can no longer be truthfully written.

MRS. W. W. PEARCE
RUNNING AWAY FROM MOTHER

NICOLA PERCHEID THE PHOTOGRAPHER'S PETS

# A Catechism on Focal Lengths

G. M. ALVES

(*Concluded*)

*Question.*— It has been explained in previous answers that the perspective or drawing of a photograph does not depend upon the focus of the lens used, but simply upon the point of view; i.e, upon whether the perspective distance has been well chosen: that with any focus this perspective distance should be the same, and that then the images will vary in size just as the focus used, and in nothing else, excepting as to a depth of focus. Now, what about the scale of the images? Ought there not to be some natural scale? And does not the focal length used determine this?

*Answer.*— Correctly speaking, the focal length (more exactly, the conjugate focal length) used in the making of the photograph should be that distance at which the photograph is viewed. This will be obvious when we refer to the instance of holding the pane of glass to any scene, where the images as etched upon the glass were of the same size as those in a photograph where the focus used was that of the distance of the eye from the pane of glass. Consequently, to be quite natural, if we are to view a photograph at a normal distance of fourteen inches, then it should be made with a fourteen-inch lens. But while all this is true, yet the mind or the eye readily adapts and accepts any other reasonable scale. If this was not so, the large majority of pictures, whether photographs or hand work, would suffer condemnation. If we keep within the limits of from six to twenty-four inches focal length for photographs to be viewed in the hand, we shall be safe. Smaller than the six inches will give pictures an appearance of receding, and longer than the twenty-four will give an appearance of advancing of the objects in the photograph when viewed at the normal distance.

*Ques.*— In a former reply it was said that the focus of lenses affected the depth of focus in a photograph. Now, in the first place, what is depth of focus?

*Ans.*— When a camera is extended to the focal length of its lens, each point of a distanct scene sends its rays of reflected light to the whole of the exposed portion of the lens, and this bundle of reflections is coned; i.e., focused to a corresponding point on the screen or sensitive plate. Now, near-by objects, the

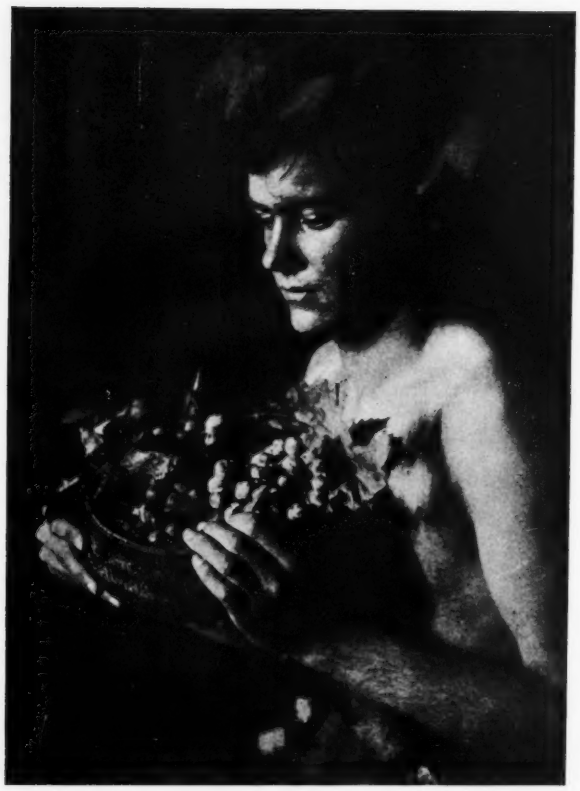
G. CASTRUCCIO GOSSIP

THIRD AMERICAN PHOTOGRAPHIC SALON

conjugate foci of which are appreciably greater than the focus of the lens, would be coned to a point beyond the screen or plate, and, as a consequence, are intercepted by the plate or screen in a "circle of confusion." So, too, if the lens is focused upon the near-by objects, the cones of the distant objects are focused to points before they reach the plate or screen, and then continue in reversed cones which are intercepted by the plate also in "circles of confusion." Of course, strictly speaking, there is no such thing as a focal depth to any lens, but it is agreed that when the "circles of confusion" do not exceed one one-hundredth of an inch in diameter, then they will not be noticed by the eye, and within these limits, fore and aft, is the depth of focus of the lens.

*Ques.*— In what way, or by what rule, does the focus of a lens affect the focal depth of a photograph?

*Ans.*— The shorter the focus, the greater the focal depth. Aside from a slight negligible quantity, the rule is, the focal depth varies inversely as the square of the focus. Compare a 6-inch focus with a 12-inch: 6 x 6 gives 36; and 12 x 12 gives 144. Consequently, as 36 will go into 144 just four times, the 6-inch focus will have just four times the depth of focus as will the 12-inch. Compare a 7-inch focus with an 8-inch: 7 x 7 gives 49; and 8 x 8 gives 64. Consequently, the 7-inch has about thirty per cent more focal depth than the 8-inch. And so on, for any other focal lengths. Although not in the question, it will be



WM. S. RICE BACCHUS

well to explain that there is another element which determines the focal depth, and that is the diameter of the stop or aperture used. The rule is, the depth of focus varies inversely as the diameter — not the area; so that a lens working at F/8 (U. S. No. 4) will have just one-half the focal depth as when it is put to work at F/16(U. S. No. 16). It may also be added that these two elements, focal length and diameter of aperture, are the only things which affect depth of focus; and those who specially advertise the great depth of focus of their lenses are really not ingenuous, but are playing upon the credulity of the ignorant. Nothing short of an abrogation of a natural law will prevent two makes of lenses of the same focus and aperture from having precisely the same focal depth.

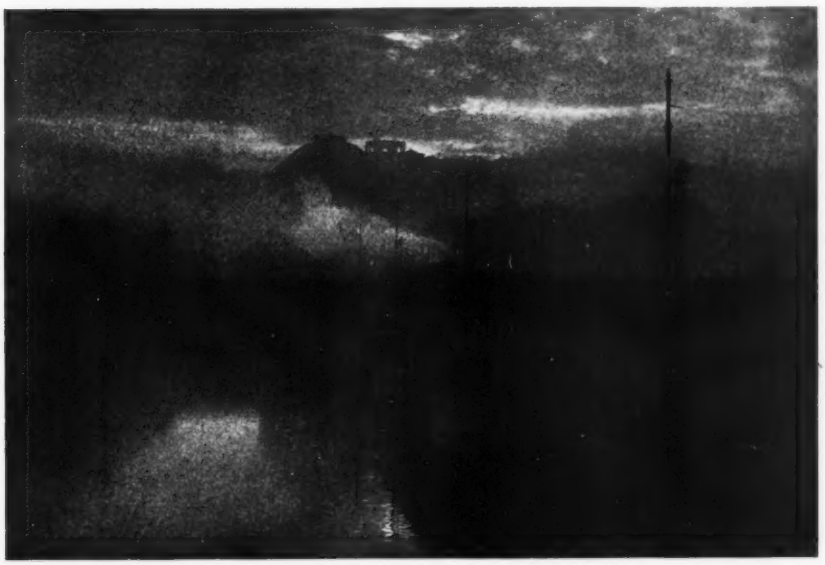
*Ques.*— Are there any rules by which one may know the nearest distance beyond which all will be in depth of focus, for any particular lens?

*Ans.*— Yes, quite precise ones; but the following will be quite near enough, and may be easily carried in the head: square the focus of the lens in inches,

and the result will be the distance in feet beyond which all will be in depth of focus when stop F/8 (U. S. No. 4) is used. Example: what is the nearest distance beyond which all is in focus in using a 7-inch lens with stop F/8? 7 x 7 gives 49 as the distance in feet. With an 8-inch lens, 8 x 8 gives 64 as the distance in feet. If we use a stop of smaller diameter, then the distance will be less. Thus, in the last case, if we use stop F/16, the distance will be one-half, or 32 feet. The novice must here be cautioned against thinking depth of focus is always a good thing. Sometimes it is, and sometimes it is not. But when, and in what particulars, would lead to long digressions.

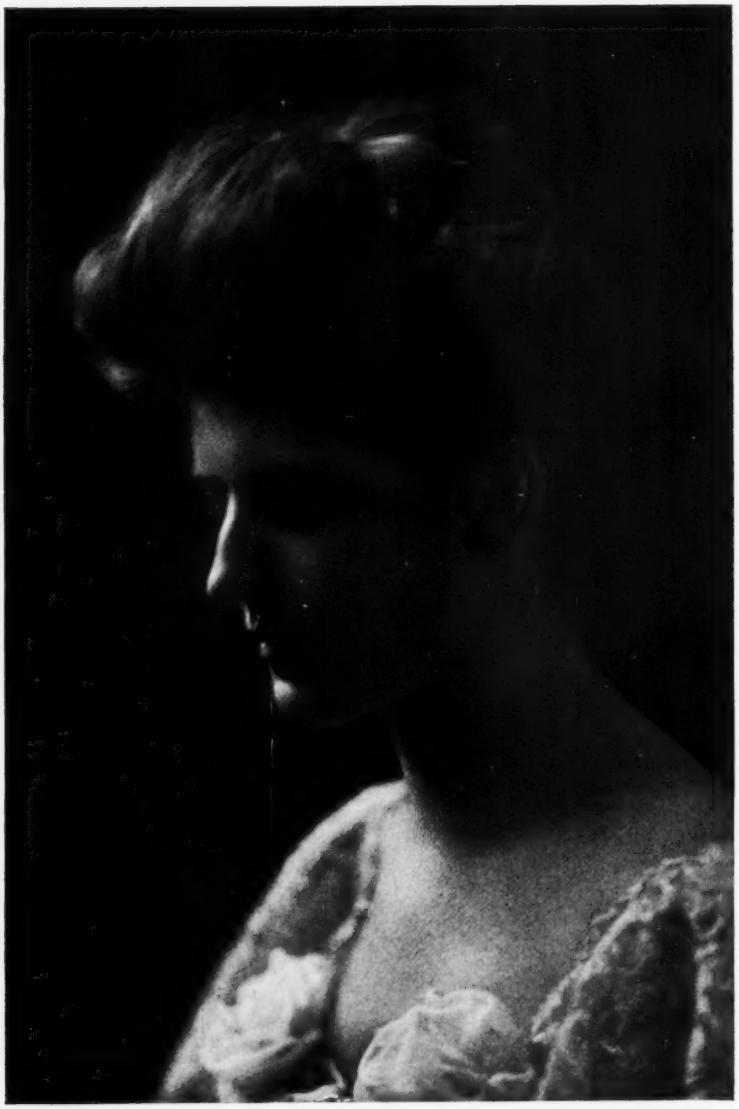
*Ques.*— As a general proposition, what is the best focal length in reference to the plate used?

*Ans.*— This is somewhat a matter of individual opinion. The present respondent thinks, taking it up one side and down the other, that a focal length equal to about the diagonal of the plate will subserve the most uses. Many, especially those who affect the artistic, demand a longer focus; but the length given above will give an angle of view in a scene which will best meet popular demands. If for special work a longer focus is called for, the back member of any excellent symmetrical lens (and why work with any other?) will give about double the focus.



NINO FERRARI — PONTE VITTORIO EMANUELE, TURIN

THIRD AMERICAN PHOTOGRAPHIC SALON



H. MISHKIN
A GIBSON BEAUTY

# The Graflex Camera in Porto Rico

AUSTIN K. HANKS

PUERTO-RICO, the Spanish name of the delightful isle of Porto Rico, means "Rich Port." There are truly no two words which would better describe that delightful tropic island. For beauty of country, interesting and fascinating street-scenes, quaint bits, old ruins, cathedrals, markets, etc. (some of them from two to four hundred years old), Porto Rico is truly a Mecca for the camerist.

It was my good fortune to spend a period of five weeks in Porto Rico during the most delightful season of the year. The season is from about the middle of December till the latter part of March. During the February that I was there I made nearly three hundred and fifty exposures, making sixteen dozen exposures on roll film and twelve dozen on 4 x 5 plates with the Graflex Camera, the balance being made with a 5 x 7 tripod (Graphic) camera. Of the total amount of exposures made I lost but twenty. None of the developing of either plates or films was done until after my return to New York, with the exception of three rolls of film which were developed with a developing-machine at the very beginning of the trip, and this was done merely to see how the exposures were running. My original intention in taking the machine was that I would probably be able to develop all of the films at intervals during the trip. This idea I immediately discarded as being decidedly far from practical, the greatest handicap being lack of water. On the steamer fresh water is nearly as scarce as hen's teeth, and on land the water is both hot and dirty. All of the fresh water is rain-water, caught on and piped from the tin and stone roofs of the various buildings and retained in open tanks. Most that I tried, as before said, was dirty, and generally had a temperature of nearly, or over, 80 degrees.

However, as I have titled this article "The Graflex Camera in Porto Rico," I will proceed immediately to "get down to biz" as doubtless some practical points regarding the use of a Graflex in the tropics, various exposures to be given, and method of development will be of value to a large number of my readers.

My outfit is the 4 x 5 reversible-back Graflex of the good old "first-model" type, with the original model shutter, which can be regulated at will from any variation of exposure from $\frac{1}{5}$ to $\frac{1}{1000}$ of a second. This model shutter is decidedly my favorite, and I much prefer it to even the latest continuous curtain affair which gives you only about a half-dozen different apertures as against fifty or more variations of the good "old-fashioned" type. It is all nonsense to say that it is "complicated" and "easily gotten out of order." All that is needed is a little caution and some common sense. The writer's Graflex has been in constant use for several years, and with it hundreds of exposures have been made, and it has not seen the repair-shop yet. The lens which I use almost exclusively in this camera is the 8-inch focus Cooke of the F 4.5 series. A lens working

AUSTIN K. HANKS
MARKET SCENE IN SAN JUAN
SAN FRANCISCO STREET, SAN JUAN

at F 4.5 is a decided advantage to have for use in a Graflex. The accompanying market-scene was made *before* 7.30 A.M. and at an exposure of $\frac{1}{125}$ of a second with the open lens. A pointer in taking market-scenes, I think, will prove interesting. The Spanish, especially "the kids," are about as "nosey" a set of folk as I have ever seen, particularly when the attraction is an "Americano" and he is endeavoring to make pictures. When you really see something in a market *you want,* just size it all up, get your shutter ready, slide drawn, etc., and then pick out some object at a direct right angle, or a still greater *opposite* direction, to the subject you really want, but which you think is very nearly the same distance from your camera as the subject which you really wish. This gives you your focal point. Then deliberately continue to point your Graflex in this opposite direction, and in a few moments you will have a semicircle of interrogation-points in the form of humanity directly in front of you, and some of them not more than six inches from the lens, but—these few moments give you exactly what you wish; it gives a clear sweep from yourself to the subject you do wish, and — when the critical moment arrives — turn yourself quickly around and a press of the thumb secures results quite similar to the San Juan market-scene herewith reproduced. A very little study will show how fine and clear the foreground view is, and also that not a single person in the picture was conscious of the exposure being made. In taking street-scenes, where the streets were somewhat crowded, I found a similar method of work very advantageous. In all cases, be sure to have the mirror set, focal plane shutter wound and set, an unexposed plate ready and in place, decidedly previous to the making of, or even wishing to make, an exposure; in fact, I generally make a habit of doing all of the above directly after the making of an exposure; then I am always ready, without further thought. I use the lens at F 4.5 (wide open), F 5.6 and F 8, and vary the exposure from $\frac{1}{125}$ to $\frac{1}{300}$ of a second. When the light is not very intense, I found F 5.6 and F 4.5 with $\frac{1}{125}$ or $\frac{1}{150}$ second an excellent exposure. When the light was quite intense, and the shadows not too dense, I use F 8 with $\frac{1}{125}$ second. I find these two exposures sufficient for all subjects moving at an average pace, such as people, walking horses, etc., and $\frac{1}{125}$ at F 8 (where the light will allow it) is infinitely superior to $\frac{1}{300}$ at full opening, as the smaller stop, of course, gives an increased depth of field which is a decided gain. However, in the tropics don't let the intensity of the light fool you; time, in all cases where possible, for the shadows. I once tried $\frac{1}{125}$ second out in the open, as an experiment, where I thought the light unusually bright and intense, at F 16. The result was that I was left — no detail to speak of in shadows, the high-lights fair, and picture generally chalky (that exposure just referred to is withheld from reproduction). On the other hand, you often wish a certain subject and the light is not very strong; but it is absolutely necessary to give not less than $\frac{1}{125}$ second exposure in order to be sure that moving objects will not photograph a blur. In such cases the lens referred to proves itself a true friend; all that is necessary is to use it at full aperture, and a fairly exposed plate will be your reward. I have found very, very few subjects that re-

quire a greater speed than $\frac{1}{300}$ second. For $\frac{1}{300}$ up to $\frac{1}{1200}$ (the shutter's limit), I always use the lens wide open. The accompanying seagull in flight was made at $\frac{1}{1200}$ second.

A point I found out, after considerable experience, is focusing with the Graflex, useful when taking moving subjects of any character — approaching, passing across or receding from the camera. Here it is: — we will suppose our subject to be an interesting native, with a large basket on her head, walking toward us up one of the streets of Mayaguez, Porto Rico. We look in the Graflex and see her coming; she comes nearer and nearer; we focus *with* her as she approaches; she is nearly as large as we desire on the negative, but still continues to come nearer; now — when nearly, but not quite as large as we wish on the plate, we give the large focusing thumb-screw wheel a decided turn in advance, thus focusing also in advance, and when the subject moves almost but not quite into focus, then, immediately, the press of the thumb on the left *makes the exposure* and our subject is in exact focus at the instant of exposure. The advantage in this is the fact that the critical focusing is done in advance, leaving the eye and mind solely centered on the actual moment of exposure when the subject *itself* moves into the exact place which *is the* focal-point by its *own movement.* However, it all must be done in less time than it takes to tell it. In objects moving away from you the movement of the focus would be the opposite to that just described, as in that case the lens would be advance-focused by turning same in advance toward the sensitive plate, instead of away from it. However, I feel positive that to those who may not already know of this method of "advance focus" it will, after a little practice, prove of *real value.*

In traveling, one of the greatest objections to the use of plates is the lack of a suitable place for changing the same. In a town of any size, such as Ponce or San Juan, one is generally sure to find a professional photo-studio, and after traveling several thousand miles in a large number of places, I have yet to find a professional who did not have sufficient courtesy to allow me the use of his dark-room for the few minutes required to change a dozen or two plates. Thus our problem of changing is solved — where a professional studio is accessible.

In small places (and in the interior towns, such as one finds in Porto Rico) a dark-room can always be quickly made in the following manner: Take a small four-legged table, of the usual height of about thirty inches, place the same against the wall of room, and then grab all the blankets, bed-quilts and coverings you can find and form the remaining three sides required around and below the table. Our dark-room is all ready and the real fun begins — that of arranging one's self in a position in the same so as to be able to work and perhaps handle two dozen 5 x 7 plates in a space two feet square. However, I have found from experience that the above is quite practical, and it really works well. A number of large thumb-tacks and a small candle ruby lamp prove useful accessories.

I know that many will ask, "Why not use a closet?" Certainly, if a suitable one can be found; but four-fifths of the time they will be "out-of-sight." I don't remember having seen one closet during my entire trip through the island.

SEAGULL IN MID-AIR — NATIVE HUTS ON AN ORANGE PLANTATION
HUT AND TYPICAL NATIVE WORKERS ON AN ORANGE PLANTATION
AN AMERICAN BUNGALOW IN THE INTERIOR — A GROUP OF NATIVE CHILDREN

*Photographs by Austin K. Hanks*

A few words regarding development of Graflex exposures may not be out of place, at this time. In plate work (with Graflex) I always use the Cramer Crown plate, metol-hydroquinone developer, and a tank — kept exclusively for this purpose — for the development. The metol-hydroquinone stock solution developer is diluted with several times its bulk of water, and placed in tank (without any addition of 10% potassium bromide) at a temperature of about seventy degrees. The plates—usually twelve 4 x 5 at a time—are placed in this solution in tank and immediately afterwards, each plate, wet, is gently rubbed over with a tuft of wet absorbent cotton to remove all air-bells and particles of dust; this being done, the plates are allowed to remain for fifteen minutes without being examined, and with the top of tank covered so as to exclude every trace of even ruby light. At the end of fifteen minutes the entire developer is thrown away and a *fresh* solution of developer (the same proportion in every respect as the first) is added, but at a temperature of about seventy-five degrees or eighty degrees (in winter). In summer, none of the developer should be over sixty-five or sixty-eight degrees. The development by this method is completed, in accordance with exposure given, in a total of from twenty minutes to two hours. The advantage of this treatment is the bringing-out, absolutely, of all the detail in the shadows (in proportion to the exposure given), and at the same time keeping the high-lights correspondingly thin, so that all detail in both high-light and shadow is registered and retained in the print.

Now—in closing—just one more remark. All of the foregoing, I think, will really prove "worth while" to a large number of my *Photo-Era* friends, as it is all based on actual experience; but I am going to add another bit of experience which, I am sure, will be of interest to you all (and which, by the way, is original) but can be purely considered only as a joke. I have two books—not photographic — perfectly good books, books I would not blush to show to any one, but books I much prefer that most of my friends never see. Well, I did n't want to tuck them away, for as sure as fate some one — and, of course, the wrong person — would find them, so here is what I did. I wrapped them up neatly with two pieces of plain wrapping-paper and tied with string like any ordinary package, but on each side I carefully wrote with blue pencil, "Open only in ruby light." I have left them around, without any special care whatever and it is now over a year since the package was first tied up. "Open only in ruby light" worked admirably. Try it!

*If you accept Art it must be part of your daily life. You will have it with you in your sorrow as in your joy. It shall be shared by gentle and simple, learned and unlearned, and be as a language all can understand.*

WILLIAM MORRIS

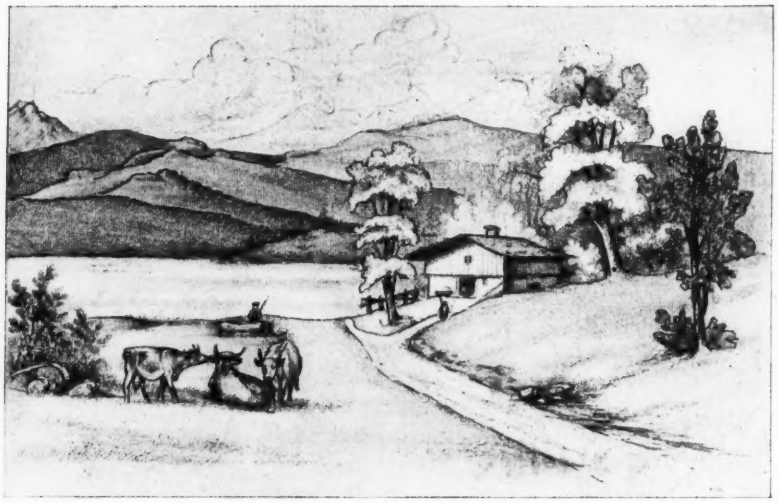
# Perceptions of the Visual Sense*

C. BAUMANN

FOR farther consideration of the center of interest in a picture we will now select another subject — an open landscape. The possibility of transposing the chief point of interest occurs here more frequently than in the case of a building. We have not the option of moving this point more to the right or to the left, but we can transpose it from the foreground to the horizon — in the extreme distance — and even to a point beyond, with the result that the aspect of the entire scene may be altered many times, in each instance producing a different effect. It would now seem as if, in the selection of an object to serve as the center of interest, we were free and untrameled; yet in reality this is the case only to a limited degree, the reason being that our freedom of will is unwittingly influenced by various phenomena, which lie beyond the scope of our purpose. This is best explained by a few illustrations. Let us imagine a landscape traversed by water. This side of the lake, in the foreground to the left, a meadow with a small number of cattle and a herdsman; to the right, in the foreground, several tall trees and, between them, a light-colored chalet. In the middle foreground, a narrow, tortuous road, leading to the water's edge, with a path branching off toward the cottage. The sheet of water extends from the center to the extreme left of the picture, and, at the farther shore, rises a range of hills, through which the eye perceives a mountain-chain forming the extreme distance of the landscape. Let us observe the landscape at different times during the day, selecting, for the first critical inspection, a morning hour. The misty morning air draws a veil over the lake and the background, and the whole landscape forms, as it were, an accessory to the group of cattle, which, through its animated movements, interests us more than all the rest of the landscape. We feel as does the child in the cradle, whose attention is arrested by a toy set in motion by its mother. The grazing animals represent for the moment the chief object of interest in the quiet landscape; the landscape itself constitutes in this case only an accessory to the entire picture.

An hour later, when the mist is less in evidence, without having been entirely dissipated, we view the landscape a second time. The sunlight has gained in vigor; the nearer shore asserts itself more clearly than the surface of the lake and, more particularly, than the hills and mountain-chain rising in the background. The animals now fail to excite our interest, as they are lying down and appear motionless. A light vapor still lingers over the watery surface and the hills. On the other hand, the chalet with the adjoining trees, brightly illuminated and glowing with color, stands out with such prominence, being effectively relieved against the somber background, that we must regard it, with its immediate surroundings, as the principal object in the landscape, and all else of secondary

*Extract from C. Baumann's "The Principles of Art, their Origin and Application." Translated from the German by Wilfred A. French.



AN ILLUSTRATIVE LANDSCAPE

importance. The different shades of green of the trees and the meadow, and the bright, cheerful cottage are set off against the lightly-bluish and mellow-toned background with extraordinary effectiveness. This time the brilliant coloring claims our attention, as did the motion a short time ago. Several hours pass, and again we view the landscape. The sun has risen higher and almost absorbed the morning mist. The cottage and its environments have lost for us color and charm, in that the entire landscape greets us more radiantly than before. But now the lake claims our attention; trees, meadows, chalet, the entire foreground and distance — all are subservient to the ruling *motif*. Although the air is still and scarcely a movement is visible on the lake, the eye is held captive for some time by the play of light on the watery surface and the shimmer of the glittering wavelets. But ultimately King Sol is too kindly disposed, his rays developing such dazzling splendor upon the waters of the lake as to mar the pleasure of seeing. . . . The day is declining; soon it will be dusk. The sun by this time is directly facing us, illuminating all objects on the side away from us. For this reason the contours of trees, hills and clouds are outlined against the bright sky with extraordinary emphasis. While the sky, alive with the play of light and color, monopolizes our attention, all terrestrial objects appear gloomy and colorless. Trees and hills tower like specters above the earth, resembling dark, flat figures, sharply relieved against the celestial background. There is no doubt that at this moment the gorgeously-colored evening sky, together with the sharply-outlined objects rising above the horizon, is the center of interest in the picture spread out before us, and that all other objects in the landscape are of secondary importance — being, in fact, mere accessories.

# Paper Negatives in the Geological Survey

H. F. LAMB

THERE has been developed in the photographic department of the Geological Survey, a process of making and using paper negatives, which both expedites the work and decreases the cost in no small degree. An average of two thousand maps, tracings, drawings and other pieces of graphic matter in line, require reproduction every year, in their work, besides numerous reprints of negatives already in existence, of similar pieces of copy already on file.

To have made these copies on glass would have required an enormous storage capacity, even if glass large enough could be obtained. The largest paper negative made in single sheet is 36″ x 50″, and glass of such a size costs heavily, besides being very heavy, cumbersome and difficult to store.

The paper negative was evidently the solution, but the paper to be obtained for such purposes at the time this work was taken up was not satisfactory for the results wanted. Experiments were made, therefore, with a view to producing a negative paper which would give the maximum of contrast with the minimum of half-tone, which would be fast enough for quick exposures, which would keep well, not curl too violently, and which would act, in printing, exactly as well as gelatine or collodion negatives mounted on glass.

Such a paper was finally evolved, the formula submitted to paper manufacturers, and is now supplied to the Survey direct, being made for that use alone. Even more important was the paper from which these negatives were to yield positive prints. In order to do away entirely with curl, frilling, blisters and silkiness of surface which would not readily take ink, a paper was required having no—or very little—gelatine. This paper, also, was wanted to give great contrast and no half-tone at all. It can be imagined that its manufacture became somewhat of a problem, but when it was demonstrated that it could be made, a prominent manufacturer of photographic supplies took the matter up, and now supplies it, exclusively, to the Geological Survey.

When a piece of copy comes to the laboratory to be reproduced, it is copied, not in the camera, but directly upon the sheet which will be the negative. The copy is placed, face inward, in the huge printing-frame, the sensitive sheet laid in contact as in ordinary printing, and then the air is exhausted between the back of the frame and the glass by means of a pump. This gives absolute contact all over the surface. Exposures, for making the negatives, run from a fraction of a second, for thin copy, such as tracing-cloth, to several minutes for copy on cardboard. Large sheets of cardboard, too thick to see through, can be printed with the powerful violet rays of the arc lamp employed to do this work.

The paper negative is developed in an ordinary solution of ortol-hydroquinone — ortol being used instead of metol simply because metol is poisonous to some workmen. Any good paper developer works well with this paper. The result of

G. CASTRUCCIO A BRIDGE IN VENICE
THIRD AMERICAN PHOTOGRAPHIC SALON

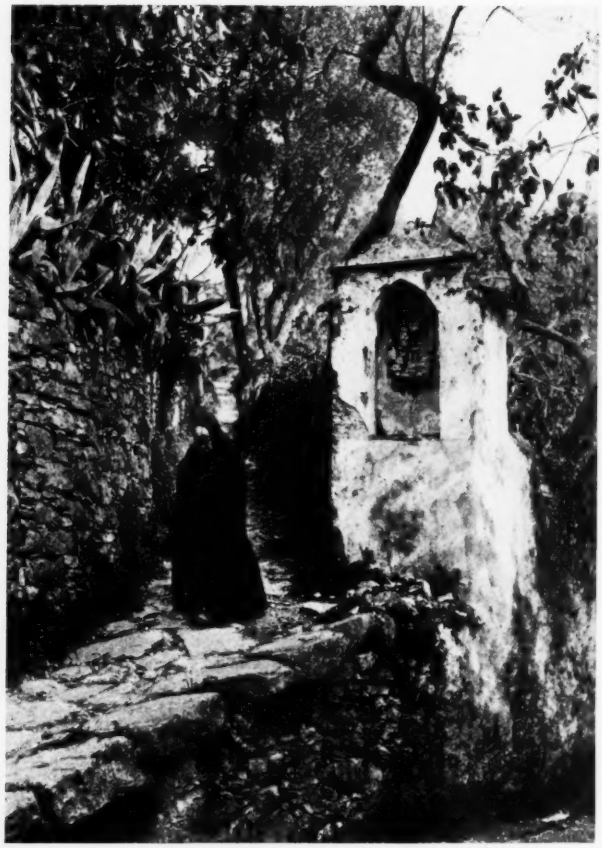
development is a sheet of uniform density and blackness, with the black lines of the original copy in pure, uncolored white, as is shown in the illustrations. These sheets are fixed fifteen minutes — like any chloride or bromide paper they give no visible indication of the completion of fixation — and are then washed in the usual manner, after which they are dried — on drying-racks of cloth, if no special hurry is to be made, or beneath an electric fan if there is a hurry.

From this paper negative, in its present form, without waxing, or any further treatment whatever, the print is made, in the same manner that the negative itself was made — by placing in the printing-frame, covering with a sheet of the paper used to make the prints from, and which, as noted above, is different from the negative paper, and exposing as before. It should be noted, however, that although the exposures differ in making the original paper negatives, due to the variation in the thickness of the copy, the exposures for the prints are almost always uniform, amounting to about six seconds.

These prints are developed in the same way — same tray, same solution, same formula, and yield prints with jet black lines on a perfectly white ground. Having scarcely any gelatine emulsion — none that can be detected — they fix in the minimum of time and are also washed very quickly. When dried, they lie perfectly flat and free from curl, a feature which is very essential in such reproductions. The finished prints, and the original paper negative, together with the copy, are returned to the division making the requisition. There the paper negative is filed, to be brought forth and sent up to the laboratory for reprinting when extra copies are required.

LEWIS LLOYD AN OLD STREET, WARWICK

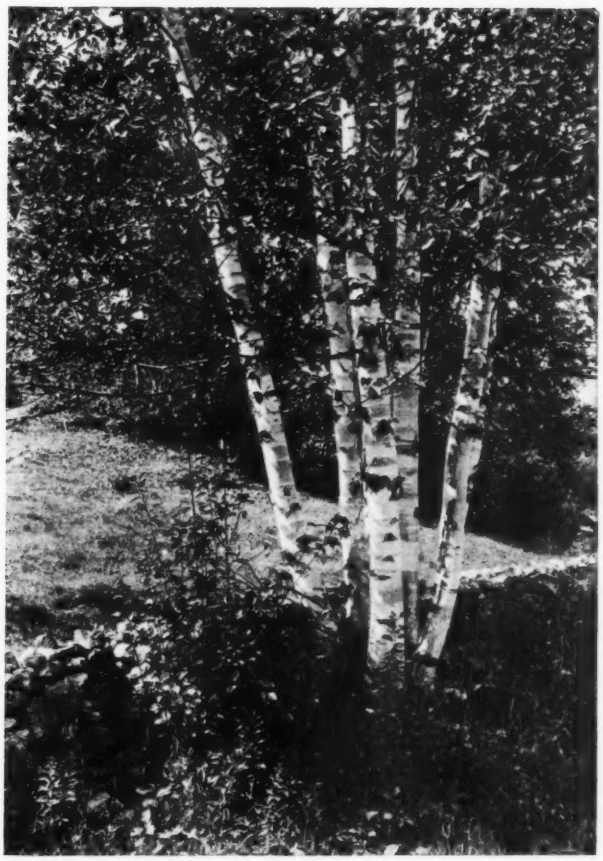
It is here that the ability to store such negatives makes a great saving. With thousands now in existence and two thousand and upwards coming into existence every year, and all valuable, it is obvious that, even if glass could be cheaply obtained in the required sizes, it would be impossible to store it. Consequently, if it were not for the paper negative, such work would have to be done by copying in the camera with the wet-plate process, resulting either in an unnecessarily large number of prints being made before the plate was destroyed, or the possibility being always present of having again to do the same work over when the edition of reproductions was used up. This would, of course, waste time, pile up the work, cut down the reproductive ability of the laboratory and thus increase expense. The saving in money is represented, therefore, not only in



G. R. BALLANCE A WAYSIDE SHRINE

the saving of cost of glass over paper, but in the time saved in not having to make an original negative but once for any given piece of copy.

The speed with which reproductions of tracings can be made is surprising. The illustrations which accompany this story were made expressly for it, and in the presence of the writer. The tracing-paper negative was laid in the big pneumatic printing-frame, a sensitive sheet of negative paper placed upon it, the frame closed, air exhausted, an exposure of possibly half a second given by arc light, air released and frame opened, negative developed, fixed, rinsed, laid on a sheet of board covered with zinc, and with a wet sheet of printing-paper beneath the negative, exposed to the same arc light for four seconds, after being squeegeed in contact, stripped, print developed and into the fixing-bath, all in less than



WM. C. STARR THE BIRCHES

three minutes — less time than it takes to tell it. Print and negative were made, fixed, washed and dried and delivered to me, within half an hour!

There being no halation in paper negatives, prints can be made from tracings having lines innumerable, all but in contact with each other, and with space between them hardly to be seen with the naked eye. The negative preserves this detail intact, and the print reproduces it exactly, so that in all respects the print is the equal of the original. In all respects save one, perhaps — prints and negatives made on paper are liable to change their dimensions from dampness, so that there may be, at some future time, a difference of a fraction of an inch in the size of print and original copy. But it is seldom that physical measurements are made, save for proportion, which remains the same during stretching and shrinkage.

L. O. GRIENWALDT AN IDEAL HAVEN

Development takes place very quickly, in both negative and print, a maximum printing density being obtained in the paper negative in less than thirty seconds with an average exposure. The negatives are similar to glass negatives, in that a technically imperfect negative—one over-exposed—will yield a perfect print. The finer lines may be somewhat darkened by silver deposit, and yet their relative density to the rest of the negative be such that they will yield a bright and perfect print. The negative paper is rich in silver and the deposit is a deep solid black, so that when held up to the light the negative looks like a remarkably fine wet-plate line-cut negative.

Reverting to the time required to produce a positive print from copy, if it is essential, matters can be expedited by not fixing the negative after development, but squeegeeing it wet with developer to the wet-down sensitive paper and ex-

G. R. BALLANCE — ON LAKE MAGGIORE

posing it. Development and exposure then proceed side by side, and the print, stripped from the negative, is ready for the fixing-bath. The workmen regard proper fixing, particularly for the print, as of more importance than thorough washing, and their experience bears out their contention. Paper negatives and prints several years old seem in perfect condition, many of them made and finished without that thorough washing which is generally regarded as essential to permanency. The negative paper, having a gelatine emulsion, of course takes longer to fix and wash than the printing-paper, the emulsion of which is so attenuated as to be imperceptible.

The paper is stored in closets arranged expressly for the purpose.* The printing-frame, with its air-pump and exhaust-chamber and the double rubber-and-cloth back from which the air is exhausted to produce uniform and accurate contact between copy and paper, even when the frame is used to its maximum capacity, was designed and made expressly for this work, although pneumatic printing-frames are used in other photographic processes elsewhere. The printing-light is an arc, inclosed in a chamber closed by a shutter worked by the foot, and exposures are possible as short as a fifth of a second, and as long as may be required.

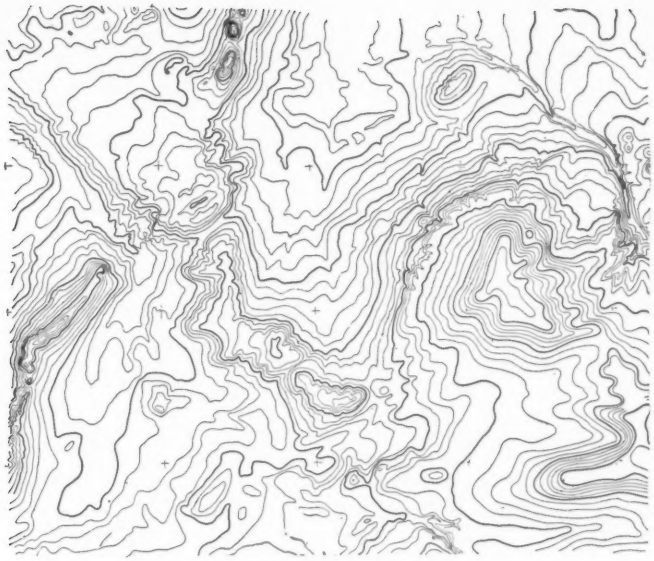
The paper, both negative and print, is worked in a light yellow working-light. No special precautions are taken in its storage, beyond the fact that the closets, of course, are light-tight; and the keeping quality of both papers is excellent.

Another idea which has been worked out in the Survey and which saves much valuable time, is a sensitive tracing-paper. Usually, when a map or other drawing is to be reproduced, say in blue-print, a copy of it is made by tracing upon paper or cloth with a pen. Sensitive tracing-paper has been and is made and used in the Survey, by which the original tracing is made in a few minutes by a photographic process similar to that described above. The difficulty, of course, is to coat the paper so that it will not tear or cockle, on account of its thin texture, but this problem has been satisfactorily solved and the discovery is now in active use.

The whole principle in the work is the saving of time and material, and the production of the very best possible work. No time, trouble or money expenditure has been deemed too great to further this ideal, and the result is that in all the departments of the photographic laboratory, of which the map-printing is but one, there is a maximum of efficiency for the number of men and amount of material employed.

The map reproductive process as a whole is a very beautiful one, and commands the admiration of all photographers who see it. It is so simple and so perfect; the speed with which it can be worked is so remarkable and the results are so fine, that it is a matter of pride not only to the laboratory, the men who work it and the brains which originated and improved it, but to those who, in using the results of the process, benefit by its existence.

*See article and pictures by C. H. Claudy, elsewhere in this issue.



FINISHED PRINT OF MAP

PAPER NEGATIVE

*Both illustrations were made expressly for* PHOTO-ERA, *by courtesy of F. E. Baird, Chief Photographer, U. S. Geological Survey*

# EDITORIAL

## Shall Dealers and Manufacturers Participate in Conventions?

THIS question is manifestly one for the photographers to decide. It has been discussed pro and con, and, while not prepared to offer a solution of the matter, we can, at least, present a suggestion or two that may help bring about a clearer understanding of this controversy.

Is it not true that the photographers' conventions — referring to the annual meetings of the national and state organizations — are, as a rule, more successful, from both educational and financial standpoints, when the dealers and manufacturers coöperate with the photographers, than otherwise? We have personally attended twenty-seven conventions of the national body and are convinced that, had the dealers and manufacturing-firms not joined forces with the regular delegates and shared the expense attending these annual reunions, the craft would have been deprived of, to them, the most important event of the year. As for the educational value of the display of apparatus and accessories, and demonstrations of technical manipulations, this cannot be disputed. It is well known that the financial affairs of art clubs are less well managed when laymen are excluded from active membership. Eliminate from conventions the dealer and manufacturer, they who occupy the largest amount of floor and wall space — thus contributing substantially to the official treasury — and the photographic organization would soon face a financial crisis. After the delegate has gone down deep into his pocket to defray traveling-expenses and hotel-bills he is not disposed to help wipe out a deficit. The last convention of the Photographers' Association of Illinois, one of the most brilliant events of the kind recorded in the history of that State, ascribed its success largely to the active participation of the dealers and manufacturers. As the concluding ceremony the delegates assembled unanimously passed a resolution to that effect. The third annual reunion of the P. P. A. of N. Y., April 3-5, under the leadership of Pirie MacDonald, was a notable exception, as all the world knows. But to conduct a national convention along similar lines is, obviously, a different proposition, and its success decidedly problematical. We should like to see the experiment tried. Who are the men willing to plan and execute such an undertaking?

## The Photography of Child-Life.

AMONG the workers whose pictorial achievements are attracting widespread attention in the photographic world is Mrs. W. W. Pearce, of Waukegan, Ill. Her eminent success in that most delightful of pictorial fields has inspired many others to similar efforts of activity; but, judging by numerous requests for information on that subject, which have been addressed to the editor, it is evident that the photography of children is not so easy as it

may seem. Many wish to ascertain the secret of Mrs. Pearce's art, but one may as well try to analyze the mystery of the nightingale's song. Upon inquiry we find that this lady's success is due to her passionate love of children, her intimate knowledge of the ways of the little people and her charming and sympathetic personality. Many women have this precious gift, but not all, unfortunately. Fancy a woman with a natural dislike for children — one finds this childless, abnormal type among the fashionable class, readily enough — trying to make friends with a sunny little baby girl! Her simulated, insincere tone of persuasion makes a meagre impression on the infantile mind; the little one responds feebly, if at all, and then turns away. Such a person would hardly be expected to produce a wholly successful photograph of a child. The little folks are very susceptible to affection and sympathy — emotions which, when blended with womanly tact and a magic influence, as no doubt exercised by Mrs. Pearce in her enviable pursuit, place an effective instrument in the hands of a photographer of children.

## Photographic Literature

THE present year has been unusually productive of valuable contributions to photographic literature. Of particular interest to picture-lovers are the sumptuously-illustrated annuals published in Berlin and Halle, and which present, in a highly-artistic manner, the work of the most advanced pictorialists of the present day. Earnestness and thoroughness are marked characteristics of German research in all departments of science. What Germany has accomplished in the realm of photography, notably in optics and chemistry, forms one of the most brilliant chapters in the history of the art. What serious worker is not familiar with the exhaustive contributions to photographic thought by those brilliant investigators — Dr. J. M. Eder, Dr. Adolph Miethe and Prof. Hermann Vogel?

At no time since the days of Daguerre has there existed a more enthusiastic activity in photographic research than in Germany at the present time. The products of those fertile minds appear with astonishing rapidity, finding quick appreciation by enterprising publishers. There is no doubt that, although Germany cannot claim to have originated the *Neue Richtung* in photographic portraiture, that nation has developed a group of portraitists — Perscheid and Duehrkoop among the number — which, for distinctive and artistic interpretation of human character, compels admiration, and this in spite of the fact that its achievements are persistently ignored or belittled by a jealous English photographic press. Baumann's admirable treatise "The Principles of Art, their Origin and Application," published, recently, by Knapp of Halle, lifts the veil of mystery which envelops nature's secrets, and points out the way to a successful solution of the problems which confront the youthful pictorialist. In this country no work on photography in recent years has met such honestly-merited success as the admirably-written volume, "Art Principles in Portrait-Photography," by Otto Walter Beck.

# THE ROUND ROBIN GUILD

**Conducted by ELIZABETH FLINT WADE**

**A department especially designed for the amateur photographer and the beginner, in which information, advice and criticism will be freely given. Membership may be obtained by sending name and address to PHOTO-ERA, The Round Robin Guild, 383 Boylston Street, Boston, Mass.**

A. W. ENGEL — FIRST PRIZE — A SHOWERY DAY

"The harvest-fields are golden,
The scarlet poppies flame,
The harebell shakes her head at death —
But Summer 's on the wane."

WE are loth to admit the fact that Summer is going, and going rapidly. But it is too true that the days are growing perceptibly shorter, and one can hear the rustle of Autumn's footsteps at the dying of the day. Vacation will soon be a thing of the past, and workers must return to the spindle and the loom, to the counting-house and factory, to the school and the church, to all the varied industries, each of which claims its special followers. It behooves us, therefore, to make the most of the days that are left of this glorious summer.

August is one of the best months of the year for landscape work, if one takes advantage of the peculiar conditions of the atmosphere, for there are days when smoke or haze in the air gives a beautiful atmospheric effect and landscapes photographed at such times have a softness and elusiveness which is a great charm.

We long ago abandoned the idea of photographing a landscape as if it were viewed through a microscope. One tries now to convey the impression received by the spectator when enjoying the scene before him.

Another thing to be avoided is the making of extended views. A panorama is interesting but not artistic. Sidney Smith advised people to take "short views," and the amateur who wishes to make artistic landscape photographs would do well to heed Sidney Smith's advice and take "short views," instead of including a goodly share of the universe in his picture.

The best aid to composition, either in figure-studies or in landscapes, is simplicity — the fewer objects included the more satisfactory the picture.

One reason why amateur photographers seldom tire of their hobby is because it is always presenting new and interesting features. Even in the mechanical work of printing there are so many kinds of paper from which to choose, so many different tints and tones to be obtained, and so many artistic ways of finishing and mounting, that this part of photographic work, which is considered often rather tedious, never becomes monotonous.

EDGOR S. GAGE SECOND PRIZE — A SHOWERY DAY

A very attractive way of printing is to print on one sheet of paper four or five pictures from as many different negatives. This is not by any means so difficult as one who has never tried it may be inclined to imagine.

The necessary apparatus for this combination-printing is an extra large printing-frame — 12 x 14 is a good size — fitted with a sheet of plain glass; a vignetting-glass; a bottle of Straus' marl or a cake of Gihon's opaque; "cut-outs" of different shapes and sizes; adhesive strips; and plenty of black needle paper or yellow post-office paper. The "cut-outs" may be bought of any dealer in photographic supplies; and as they are very inexpensive, it is better to buy them accurately cut than to attempt to make them.

The negatives chosen for the picture must have some relation to each other, such as landscapes from some one locality; interiors of different rooms in a house, with a small picture of the exterior of the house; a number of tree negatives; seashore pictures; etc., etc.

Select the negatives and group them in the way in which they are to be printed, and mark on a sheet of paper the size of the printing-paper the position which the pictures are to occupy, remembering that the negatives are reversed in the printing. The most satisfactory way of arranging the pictures is to make blue-prints and then group these prints. One thus sees not only the arrangement as it is to appear, but also just what parts of the negatives are to be eliminated or left out in the printing-process.

Adjust the cut-out on the first negative to be used, and attach it to the glass by means of adhesive strips. Note the place on the paper which it is to occupy, and cover all the clear glass in the printing-frame with opaque paper, except that which is to receive the print, letting the edges lap over the outside edges of the cut-out. Place the sensitive paper over the negative and print till deep enough; remove, and store in a book till the next negative is placed in position. Remember that all parts of the clear glass are to

be covered each time, with the exception of the space for the negative to be printed from.

One can use cut-outs for some of the prints and the vignetting-glass for others. The grouping of pictures in the magazines gives one ideas as to artistic arrangement. The picture, when all the prints have been made, is toned in the usual way. The printing-out papers are more satisfactory for this sort of print, unless one is a skilful platinotype printer and can judge very accurately of the depth of printing.

Another way of printing from several negatives is to select the part of the negative to be printed from and cut a piece of paper the exact size that the finished picture is to be, doing this with each negative. Paste these "patterns" very lightly to the sheet of glass, and then with either the marl or the opaque paint over all the clear glass. Remove one of the pieces of paper and adjust the negative designed for it in place, and make the print, and so on till all the negatives have been printed from. Of course the paper already printed on must be protected while the remaining prints are made.

If a large sheet of paper is used the print does not need to be mounted unless the prints cover the paper, leaving too narrow a margin. In such a case mounting will be necessary.

The principal thing to be observed in combination-printing is that the sensitive paper must be so masked that the print will come exactly in the position designed for it.

In choosing negatives for this sort of printing select those which have about the same density and therefore have the same printing-quality.

## PHOTOGRAPHING BIRDS

MANY of our Guild members are interested in making photographic studies of birds and wild animals, a pursuit which requires a very rapid plate, a quick lens of long focus, a noiseless shutter, and an inexhaustible supply of patience.

With these requisites one is able to obtain many interesting pictures, pictures which give the layman a much better idea of wild life than all the reading he can obtain from the many books written on the subject. In fact, it is to photography we owe much of our knowledge of our friends in feathers and fur.

All, or nearly all, photographic studies of either birds or beasts have to be made by the instantaneous process. The subjects are so uncertain and erratic in their movements that it is impossible to calculate with any certainty their positions.

Would-be aeronauts have long studied the flight of birds as guides to the solving of the problem of aerial navigation. The late Professor Langley made many photographic studies with this aim in view — that of applying to the construction of his airship the principles which govern the flight of the denizens of the air. For this purpose he had erected in the grounds of the National Zoo two wooden towers three hundred feet distant from each other. In each one he stationed a photographer and supplied them with cameras of a special make constructed on the plan of a shotgun. An electric battery was placed on the ground midway between the two towers, with wires running to the towers and connected with the shutter mechanism of each camera.

A man was stationed by the battery, and whenever a bird appeared flying between the two towers the photographers immediately "sighted" it with their cameras and kept it in the field of the lens. Then at a signal from Professor Langley the man at the battery touched the key and the exposure was made. The photographs thus obtained showed the bird in flight from two opposite points of view; and as the camera was fitted with an apparatus which magnified the image, the pictures thus obtained were not only extremely interesting, but of great value as showing the motions of the bird in the air and how it sustained and controlled its body during flight.

Of course it is not to be expected that our Guild members will undertake any such elaborate method of studying birds in flight, but one must go to a certain amount of trouble and pains to secure interesting pictures of any subject.

In the making of bird-studies the beginner is advised to select for his subject a bird that nests near the ground. If one is not able to screen himself among the bushes, then it is a good idea to make a "blind" of green branches where he can be concealed from the observation of the bird. The camera must be set and focused and the shutter ready for instant action. Then when all is in readiness the amateur must wait the pleasure of the bird. One special point to bear in mind is that a bird is always on the alert for enemies and when it appears the most serene it is ready for instant flight. An unusual noise, a sudden movement, will send the bird away, sometimes for a long time.

Where there is no chance for screening one's self from the eyes of the bird, then set up the camera and cover it with green leaves, attach a long rubber tube to the shutter, and withdraw to a discreet distance, or as far away as length of tube will permit.

Some birds are less timid than others, and if one sits down on the ground and remains without movement the bird will after a while return to the nest, feed the young, and fly about with no regard for the intruder.

Photographing birds whose nests are built high up in trees is not so easily done. I have before me a picture made by a member of our Guild, Mr. F. S. Andrus, of Lowville, N. Y., showing the artist and his camera in a tall tree, his camera fixed to a branch of the tree and himself seated on the limb waiting for a fitting opportunity to photograph a humming-bird on its nest. The picture is very interesting, and shows how enthusiastic our Guild member is in the pursuit of his pictures of bird-life.

In the development of pictures made under conditions where the shadows made by the foliage make the light poor, one should use a developer which brings out all the detail. Metol

H. S. ADAMS THIRD PRIZE — A SHOWERY DAY

alone, or metol hydroquinone, will be found the most efficacious. In photographing under such conditions set the shutter at as slow a speed as possible, to obtain a good result.

## CASES FOR STORING AND FILING FILMS

*(Reprinted by request for new subscribers)*

THE material is manila tag board a trifle heavier than postal-card stock. Each case holds five films, and the cost of one hundred cases does not exceed seventy-five cents, thus making a storing-capacity for five hundred films at a very trifling figure.

The boards are cut in six sizes. The largest size is 6 x 6½; the second, 6 x 6; the third, 6 x 5½; the fourth, 6 x 5; the fifth, 6 x 4½; and the sixth, 6 x 4. The price of the board includes the cutting. The six different-sized pieces make one case, the left-hand side and bottom being bound with passe-partout binding. A triangle is cut in the center of each free edge of card for convenience in slipping films in and out. The illustration shows the completed case.

One accomplishes a great deal more by working in a systematic manner, and there is a certain routine in the making of these cases which hastens the work very materially.

First cut the passe-partout binding — white being the color chosen — into strips, half being six inches in length and half six and one-half inches in length. Keep the two sizes separate and fold them lengthwise through the center, the gummed side in. Next arrange the cards in piles, each size by itself, and place them in rows, beginning with the smallest and ending with the largest. Now take up one of the largest cards, then one of the next size, until you have one of each size. Lay this pile on the table and make up another set, laying it on top of the first with the cards placed in an opposite direction, and so on till all the cards have been separated into sets, laying them in alternate directions to facilitate handling for binding.

Take up a set of the cards, tap them lightly on the table to get the edges even, and clasp a paper clip over the right-hand edge, which is to be the free edge. The next step is the cutting-out of the triangles, the one on the smallest card being cut first and serving as a guide for the others.

Take one of the longer strips of binding, moisten it with a soft brush, and wetting it by just one sweep of the brush from end to end. Lay the binding with the fold coming to the edge of the cards on the left-hand side of the case, rub it down and turn the rest of the strip over on the reverse side. Gum one of the shorter strips and bind the bottom of the case in the same manner.

The cases are now ready for lettering and numbering. On the binding at the left is written the general title of the collection. If, for instance, they are foreign views, write the name of the country, as: Italy, France, and the sub-title, the special locality, as: Florence, Paris. At the left of the triangle write the number of the negative and at the right of the triangle its name. The numbers of the negatives themselves are written in white ink on the margin of the films.

The cases are numbered 1, 2, 3, 4, 5, etc., and it will be seen that the negatives go in series of five, one of the easiest ways of numbering.

The indexing is as simple as the cases. The number of the case is written in the book, and below it the numbers and titles of the negatives which it contains. Thus: Number of Case, 5. General title, Italy. Sub-title, Florence. Number of negatives with titles:

No. 21. Along the Arno.
No. 22. Ponte Vecchio.
No. 23. Goldsmiths' Shops.
No. 24. Piazza del Limbo.
No. 25. Ponte San Trinità.

The cases are set on the free or open end with the title at the top. In this position they are protected from dust. They are stored either in pigeon-holes or boxes. The number of the case may be marked on the edge of the case, as the case is an eighth of an inch thick; but without this number it is a simple matter to find a case, as they are placed according to numbers and not more than twenty in one pigeon-hole or box.

One may make a hundred of these cases in an evening, and once used they will be acknowledged the cheapest and most convenient of all film cases.

### A CLEVER AMATEUR CLUB

A VERY bright amateur photographers' club was started on the coast a few years ago, and is still doing business. It has only twelve members, each member lives in a different city, and San Francisco is at one end of the line and New York City at the other. The way it started was this. A young amateur living in New York conceived the idea of having an "Ocean to Ocean" photographic club. He therefore wrote to a friend living in Buffalo, told him of the plan, and asked him to send his letter to a friend of his own living in Cleveland, requesting him to send it on to a friend of his own in Chicago, and so on along the line, till the twelfth member was located in San Francisco. The originator of the club then made a book 10 x 12 in size with, pasted on one of the leaves, a picture of his own that he considered very good; on the opposite page he wrote a description of the picture, the manner of making it, the kind of lens used, plate, time of exposure, time of day, developer with formula, printing, etc., and sent it to his nearest club neighbor. This member added a print of his own to the book, made a criticism of the print already in the book, and sent it to his nearest club neighbor: and so on until the book reached San Francisco. This member added his print — which was the twelfth — and sent it back to the last member from which it was received, and thus it made the journey back to New York, its return journey allowing the members to see the book in its completion. A book was sent out the first of each month, and at the end of the year the numbers are distributed among the members.

They are planning now to start a "Round the World" Club, and are already in communication with friends living in foreign lands.

## Monthly Competitions

*Closing the last day of every month.*

*Address all prints for competition to* PHOTO-ERA. *The Round Robin Guild Competition, 383 Boylston Street, Boston, Mass.*

### PRIZES

*First prize: Value* $10.00.
*Second prize: Value* $ 5.00.
*Third prize: Value* $ 2.50.

*Honorable Mention:* In addition to the awards, the names of those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be published.

Prizes may be chosen by the winner, and will be awarded in books, magazines, enlargements, mounts, photographic materials or any article of a photographic or art nature which can be bought for the amount of the prize won.

### RULES

1. These competitions are free and open to all photographers, whether or not subscribers to PHOTO-ERA.

2. As many prints as desired, in any medium, mounted or unmounted, may be entered, but they must represent the unaided work of the competitor.

3. The right is reserved to withhold from the competitions all prints not up to the PHOTO-ERA standard.

4. *A package of prints will not be considered eligible unless accompanied by return postage at the rate of one cent for each two ounces or fraction.*

5. *Each print entered must bear the maker's name, address, Guild number, the title of the picture and the name of the competition for which it is intended, and should be accompanied by a letter, sent separately, giving full particulars of date, light, plate or film, stop, exposure, developer and printing-process.*

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA. If suitable, they will be reproduced, full credit in each case being given to the maker.

### SUBJECTS FOR COMPETITION

July — "Landscapes." Closes August 31.
August —"Waterscapes." Closes September 30.
September — "Sunsets." Closes October 31.
October — "Windows and Doorways." Closes November 30.
November — "Genre Studies." Closes December 31.
December — "Home Portraiture." Closes January 31.
January — "Illustrated Poem." Closes February 28.
February — "Mountains." Closes March 31.
March — "Atmospheric Effects." Closes April 30.
April—"Decorative Photography." Closes May 31.

### AWARDS — A SHOWERY DAY

First prize: A. W. Engel.
Second prize: Edgor S. Gage.
Third prize: H. S. Adams.
Honorable Mention: Dr. W. F. Zierath, Wm. A. Rheinheimer, Flora von Cpeller, Mrs. M. W. Sawyer, H. H. R. Randolph, Mrs. J. F. Jaeger, Madison Phillips, Charles W. Busiel, Edward A. Walker and Frank N. Pearson.

### A FINE INTENSIFIER

COPPER sulphate combined with iodide of potassium makes a fine intensifier for weak negatives full of detail but without the necessary strength for a satisfactory print. Make up a solution of sulphate of copper, two hundred grains; iodide of potassium, sixteen grains; bromide of potassium, forty grains dissolved first in two ounces of water. Dissolve the ingredients in order named in six ounces of water, adding last the solution of bromide of potassium. The bath must be prepared twenty-four hours before use; allowed to settle and the clear part of the liquid decanted off. Immerse the plate in this solution until it turns a deep yellow. Wash and transfer to a bath made of ten ounces of water, two ounces of sodium sulphite, and ten grains nitrate of silver. This removes the yellow color and turns the negative to black. Wash well and dry. If intensification is not strong enough, repeat the operation.

## Answers to Correspondents

*Readers wishing information upon any point in connection with their photographic work are invited to make use of this department. Address all inquiries to* ELIZABETH FLINT WADE, *321 Hudson Street, Buffalo, N. Y. If a personal reply is desired, a self-addressed, stamped envelope must be enclosed.*

BENNETT M.— For an acid fixing-bath use hyposulphite of soda, four ounces, acetone sulphite, one-fourth ounce and water, sixteen ounces. Wash plates well after fixing.

S. A. H.— The silver stains on your negatives can be removed by first soaking the plate for ten minutes in a solution of potassium iodide, allowing twenty grains to each ounce of water. Rinse well and place it in a solution of cyanide of potassium made up in the proportion of thirty grains to the ounce. If the stains are old, rub the negative in the latter solution with a wad of surgeon's cotton, using rubber finger-tips to protect the fingers from contact with the solution. In using solutions of this kind the plate should always be handled with a plate-lifter.

ANNA D.— To dissolve hypo quickly pour over it boiling water. Hypo should always be strained before using, as it is usually full of impurities. A good way to prevent the impurities from getting into the water is to tie the hypo in a piece of cheese-cloth, lay it in the receptacle and pour boiling water over it. The hypo dissolves quickly and leaves all the impurities in the cloth.

CHARLES G. R.— To brighten the color of your blue-prints which you say are dull and lifeless, lay them for a few minutes in a three per cent solution of oxalic acid.

L. N. TATE.— Do not use pyro for bromide prints or for gaslight papers of any kind. Hydroquinone is an excellent developer for prints where one desires contrasts. Metol-hydroquinone will give excellent result. Oxalate of potash is used for platinotype prints. Buy the salts ready prepared for use by simply dissolving in water.

D. W. J.— By local development of a print is meant the coating of a platinotype print with glycerine, then with developer diluted with glycerine over such parts of the picture as one wishes brought out and leaving untouched those parts which it is desirable to have eliminated. Directions for this process, which is called glycerine development, were given in a recent number of PHOTO-ERA. A copy will be sent you if you will enclose twenty-five cents, with name and address.

A. H. H.— A good formula for metol developer is made as follows: Metol, fifty grains; sulphite of soda crystals, one-half ounce; water four ounces. No. 2. Carbonate of potassium, one ounce; water, ten ounces. For development take equal parts of these solutions and add six parts of water. You can buy adhesive strips for use in making slides, etc., and they are much more convenient than to gum strips yourself. Of course you can do this, but you will find the time and annoyance saved will more than compensate for the trifling difference in the expense.

JOHN M. KANE.— To brighten platinotype prints where the detail seems to have sunken into the paper brush them over with artists' fixatif. This you can buy ready prepared, or you may prepare it yourself, using one ounce of mastic varnish to eight ounces of alcohol.

ALLEN FORBES.— Synthol is a developer manufactured in England, its foundation being obtained from orcin, a crystalline compound obtained from certain lichens. It can be used without an alkali. A formula which gives black tones and makes a negative of excellent printing-quality is made as follows: synthol, forty grains; sodium sulphite, one ounce; water, ten ounces; potassium bromide, twenty grains.

BERTHA B.— The sulphur toning of bromide prints is effected by immersion for a considerable length of time in a hot solution of alum and hyposulphite of soda, after the print has been developed, fixed and washed. Full directions for this process have been given in this department in a recent number.

BELLA DAMON.— Would advise taking a film-camera for an extended trip. The daylight-loading cameras are very compact and convenient and one can obtain films for them in almost any country. Photography is the universal pastime of the world, and it is hard to go to a place so remote that one does not find camera-supplies.

# THE CRUCIBLE

## A MONTHLY DIGEST OF FACTS FOR PRACTICAL WORKERS

**Conducted by PHIL M. RILEY**

**Readers are encouraged to contribute their favorite methods for publication in this department Address all such communications to Phil M. Riley, 383 Boylston Street, Boston, Mass.**

### SEPIA TONES ON VELOX

VELOX prints that have acquired a yellow color from over-development may be toned a beautiful sepia, says H. Baker, in an article in the *British Journal of Photography*, by converting the black metallic silver of the paper into silver sulphide. He gives the following process. The prints are first bleached in a solution of potassium ferricyanide, 200 grains; potassium bromide, 300 grains; water, 5 ounces. When the prints become markedly yellow they are washed for five or ten minutes and then toned in a weak solution of sodium sulphide, a few drops of a saturated solution to ten ounces of water being strong enough. The prints should be toned one at a time and should remain in the toning-bath several minutes after the conversion is apparently complete. They are then transferred to a dilute solution of chrome alum, and after five minutes removed to the washing-tank.

### SENSITIZING CARBON TISSUE

THE home sensitizing of tissue is the simplest of photographic operations, says Owen Roberts, in *Photography*. I myself always use the citric acid and ammonia formula, which is as follows:

| | |
|---|---|
| Potassium bichromate | ½ ounce |
| Citric acid | 1 dram |
| Water | 25 ounces |

When dissolved, strong ammonia is added drop by drop with stirring, until the orange color changes to a yellow. The change is very distinct, but I have heard a photographer say that he could never be sure when it had taken place. In such a case a little of the solution may be poured into a separate glass before adding the ammonia, and kept for comparison. When the change has taken place the portion put aside may be added, and unless it is comparatively large, or the photographer has been particularly careful not to add a drop more than is necessary, he will find that even after adding it to the main quantity the yellow color persists. If it does not, another drop of ammonia will generally put matters straight again. In this solution the tissue is immersed a sheet at a time, and is left for three and a half minutes, which I time with a little "egg-boiler." It is then taken out, drained for a minute, and squeegeed gently on a clean sheet of ferrotype, on which it is left to dry. I sensitize pieces of tissue 9 x 7 inches, and then, cutting a quarter of an inch off all four edges, it divides up into four full-size quarter-plate pieces. Whatever size tissue is used, it is a wise precaution to sensitize a piece half an inch larger each way, and then, just before printing, to trim the tissue down on all four edges. In this way the part which has been most exposed to the atmosphere during drying is removed; and, I believe, if this is invariably done, all need for a safe-edge is removed. The tissue on the ferrotype need not be dried in the dark, but stood aside in any ordinary warm room; so long as it is not put in direct sunlight or out-of-doors, there is no fear of the light getting to its sensitive surface and spoiling it. It should be left on the ferrotype till it is actually wanted for printing, as this protects it not only from light, but from impurities in the air, which, in carbon work, are almost as injurious. It is best to sensitize tissue a couple of days before it is wanted for printing, as this gives it time to get thoroughly dry, and so does away with any risk of tearing it in trying to get damp tissue off the ferrotype; it is important, for other reasons also, to print with well-dried tissue.

### LOCAL WORK IN CARBON PRINTING

BY means of a tuft of absorbent cotton it is possible to accomplish a certain amount of local treatment in carbon-printing provided the transfer-paper is smooth. Care is, of course, required, and rough transfer-papers make it almost out of the question to work on the surface of the tissue without serious damage. In attempting such a task it is well to bear in mind the fact that in the high-lights the gelatine-film is thin and far more tender than the shadows, where the coating is much thicker. To use the cotton, a tuft of it should be saturated in warm water and may then be drawn lightly over the surface of the print, which is kept under water meantime. No matter how far development may have proceeded in warm water, the cotton will be seen to remove still more of the pigment and gelatine.

### PRINTING FROM THIN NEGATIVES

WHEN more contrast is desired in printing on P. O. P., it can be secured by printing slowly in a diffused light. If the light is strong it will be an additional help to lay a piece of green glass over the printing-frame. This method may require an entire day for printing one copy, but the results are worth the effort if one fears to risk damage to the negative during intensification.

### DRYING POST-CARDS

So many readers of PHOTO-ERA have complained that they find it difficult to keep glossy post-cards flat that we suggest a satisfactory remedy. Place the cards to dry between two strips of wood about four and one-half inches apart, so that they will be sprung into a low arch, and it will be found that they will dry almost flat and will remain so.

## VIGNETTING LANDSCAPES

We are all so prone to look for painters' pictorial conceptions in nature, instead of learning directly from nature! Photographers are the ever-ready slaves to the conventionalities of art, and the square mount with its rigid edges is their especial delight. But not content with this bondage, they impose upon themselves additional servitude: lantern-slides must be constrained to fit the regulation size mat, notwithstanding the injury to the beauty of the scene. We are, however, glad to see a break from this last obeisance to the mechanical demands of the lantern operator, whose only aim is perfect dissolving.

If photographers only knew the charm given to a landscape by vignetting, we are sure the method would be more practised. The value of vignetting in portraiture needs no demonstration, and one sees numerous examples of high-grade work either by use of the vignetting-mask or by the skilful employment of brush development.

Any one of taste and discernment must acknowledge that often a well-chosen view loses much of its charm because of the hard, rigid lines of its surroundings. The vision comes to a sudden, and therefore unpleasant, stop when it reaches these barriers. How much more pleasant to allow the eye to wander off indefinitely, just as it does in the unconfined scene in nature! It is only because we are so accustomed to see the photograph set round by lines and angles of the ground-glass screen of the camera, and because, too, we think art so directs, that we take for granted that the parallelogram is the correct thing to chain up our conceptions of composition. Not only does vignetting landscapes add much to their æsthetic value, but it may sometimes be employed to improve an indifferent picture.

Sometimes unavoidable straight lines crop out prominently in a scene near the margins of the picture, such as lines of buildings, unsightly fences, etc. All such objectionable features can be kept from trespass by means of the vignetting-device.

There is not much skill demanded in making a good vignetted picture, but even if the process were the most difficult it would more than repay by the beauty secured. We may not have said much in the above remarks, except in recommending vignetting to landscapes, but if some one follows up the suggestion we shall have accomplished some good.— *Journal of the Photographic Society of Philadelphia.*

## MAXIMS ABOUT MOUNTING AND FRAMING

Pictures small in size or of delicate tones are, as a rule, improved by suitable mounts, but large pictures, especially those of a strong and decided character, are better framed close up.

According to the delicacy or strength of the subject and treatment, so the frame should be correspondingly light or heavy.

A small picture should have a relatively larger mount, but it should be borne in mind that a small picture on a large mount will dwarf the apparent size of the former. Absolutely white or black mounts should rarely be used.

A dark mount should be used for pictures of deep tone, in which it is desired to emphasize the high-lights.

A light mount is best for pictures of delicate tones, in which it is intended that prominence or force shall be given to the smaller proportion of darks.

Tones of medium tints are best employed to surround subjects in which it is required that prominence shall be given both to the high-lights and deep-darks.

As the purpose of a mount or frame is to isolate it from its surroundings, the color of the mount should not so closely approximate to that of the print as to blend with it in any part in an indistinguishable way.

It should be remembered that the glass of the frame, not being absolutely transparent, will slightly degrade in tone both mount and picture.

The color of the mount or frame should harmonize with the picture. This may be secured either by (1) a harmony of analogy (*i.e.*, a tone of the same or a similar color) or (2) a harmony of contrast in which the complementary color prevails.

Strong or crude colors should be avoided in mount and frame. Quiet or somber tones of gray, green or brown are generally appropriate.

If the frame has any carving or enrichment, the details should be emblematic of the subject, or be suggested by it, but they should not in any way be eccentric or so conspicuous as to attract undue attention. Such enrichment should diminish in prominence and importance as it approaches the frame.— *Alexander Keighley in The Practical Photographer.*

## HINTS ABOUT STAND-DEVELOPMENT.

It is not well to keep the dilute solution used for stand-development in the tank day after day, as only a few developers will endure prolonged exposure to the air, especially when very dilute. It is much better to have a number of bottles which can be filled full of the solution at the end of each day's work, and tightly corked. If care is taken that the bottles are full and tightly corked, dilute developers which are suited to stand work such as glycin or rodinal will keep reasonably well.

The developer in the tank should be stirred with a glass rod before immersing any plates in it, for, if it has remained motionless for any considerable length of time, it is stronger at the bottom than at the surface and a negative of uneven density will result. To avoid air-bubbles, it is necessary to use great care in submerging the plates to be developed. After they have been dusted with a camel's-hair brush, slide them quickly but steadily down into the solution.

Stand-developed negatives usually lose more in the fixing-bath than those developed by the ordinary method, and should, therefore, be developed a little denser than normal — until detail is visible all over the glass side of a single-coated plate is usually a good guide.

# NOTES AND NEWS

**Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication**

## THE CONVENTION OF THE PHOTOGRAPHERS' ASSOCIATION OF AMERICA

THE above event will occur at Dayton, O., August 6, 7, 8 and 9 — about two weeks after the appearance of the current issue of the PHOTO-ERA magazine. The date and place have been known to every professional worker in this country for some time; the details, however, not until recently. Every one knew that the management of the affair was in able hands, and it is a foregone conclusion that the officers of the Association, with Clarence J. Van Deventer as president, Frank W. Medlar as secretary and Frank R. Barrows as treasurer, will keep their word and make this year's convention a record-breaker in the best sense of the term. The manufacturers and dealers will be on hand, as usual, with the latest and best photographic apparatus and accessories of every kind. There will be artistic and technical demonstrations of a high order and, as the leading educational feature, a lecture by Prof. Otto Walter Beck, art-instructor at Pratt's Institute and the author of "Art Principles in Portrait-Photography," which notable work was reviewed in PHOTO-ERA of July. The Salon will be unusually interesting this year, the board having decided to select twenty-five salable portraits and award each of the successful makers a handsome Salon Certificate. All those still wishing to compete for this honor should lose no time and send their exhibits — three to six prints, framed or otherwise — *prepaid* to Chas. L. Lewis, P. A. of A., Dayton, O., and, at the same time, a request for the necessary space, to C. L. Lewis, 1217 Madison Ave., Toledo, O., not forgetting to join the Association, by applying for membership and enclosing $5.00 (admission-fee, $3.00; annual dues, $2.00) to Frank R. Barrows, 1873 Dorchester Ave., Boston, Mass., as all these privileges are open only to members, and every professional in good standing is eligible.

If you cannot arrange to be present at this highly interesting national meet, you should, at least, try for one of the many prizes, which can be done by observing the instructions indicated.

## PHOTOGRAPHERS' ASSOCIATION OF MISSOURI

THE thirteenth annual convention of this Association, held at Excelsior Springs, June 18, 19 and 20, was in every way a decided success, and reflects much credit upon the efforts and good judgment of the officers. An interesting program was provided, including music and a lecture, "Pictures and Money," by Felix Raymer. Great benefit was also derived from the continuous demonstrations in posing, lighting, negative making and printing by representatives of the leading manufacturers.

## PHOTOGRAPHERS' ASSOCIATION OF NEW ENGLAND

ADDITIONAL information regarding the yearly convention of the above-named body of professional photographers is at hand. Honorable J. W. Coler, Speaker of the House of Representatives, will deliver the address of welcome. Mr. S. M. Holman, of Attleboro, himself a prominent member of the State Legislature, will make the reply. Among the speakers on other subjects will be H. A. Collings, S. Lawrence, ex-Pres. Charles W. Hearn and A. Bement, the well-known art-critic. This list of experts is to be extended. Among the interesting features of the event will be the offer of ten prizes to be given by the American Aristotype Company, for the best work made on its paper. PHOTO-ERA hopes that as many amateurs as possible will make it a point to attend this convention, Mechanics Building, Boston, August 27, 28 and 29, as much of value is in store for them. Among the print-displays will be a collection of portraits by R. Duehrkoop and other German workers.

## PROPOSED MONUMENT TO THE MEMORY OF THE LATE JAMES INGLIS

PIRIE MACDONALD, at the end of the year 1890, suggested to me that I should endeavor to get James Inglis to write a series of articles on lighting for the benefit of the professional photographers of this continent. I placed the matter before Mr. Inglis and he at once gladly assented, because he felt that it was the duty of every man in any profession to do the best he could to help those who were earning their living in it. A great many people never realize what they owe to the profession that has given them an opportunity to earn a living; but James Inglis realized this to the full, and he wrote his articles and presented them to the fraternity without price; nay, more: when he found they were creating considerable stir he, at his own expense, went to conventions and demonstrated his ideas.

James Inglis was undoubtedly the father of the great pictorial movement that influences the professional photographers of this country today, and this art movement is the grand old man's greatest monument, and he, were he alive, would care for no other recognition.

Pirie MacDonald and I were discussing this idea a few weeks ago, when he remarked that, though this was undoubtedly true, there was another side, and he felt that the photographers

of this country were under obligation to the memory of James Inglis, and that since it was at his suggestion the articles were written he felt it was the proper thing for him to make another, and it was this: that since I had been so closely associated with Mr. Inglis in the propaganda of artistic lighting, it was but fitting that I should take charge of a movement to erect a suitable memorial over his grave. He proposed that I give an opportunity for every professional photographer in this country who felt that he had been benefited by the teachings of Mr. Inglis to contribute the sum of $1 toward a monument, and that no larger sum be accepted from anybody, and he forthwith placed in my hands the first contribution. I need scarcely say that I gladly undertook the duty thus offered me.

The first step was to secure the consent of Mrs. Inglis and the children, which I am glad to say was very willingly granted.

It is not intended either by Mr. MacDonald or myself that an elaborate monument should be erected, for we feel that a simple stone or tablet bearing a few well-chosen words will be sufficient. It will be the sentiment behind the act that will count, not the act itself. We consider that from one to two hundred dollars will be enough, and we invite prompt contributions of $1 each.

All contributions should be forwarded to me at my home address, Box 82, Glencoe, Ill.

F. DUNDAS TODD.

## NECROLOGY

IN the recent death of John A. Walker, Esq., vice-president and treasurer of the Joseph Dixon Crucible Company, this distinguished firm loses one who has contributed to the activity, success, and prosperity of one of the largest manufacturers of lead-pencils of the world. He was born in the city of New York in 1837, receiving his early education in the schools of Brooklyn, but chose to enter commercial life. After an excellent business-training in the city of New York, and after serving his country in the Civil War of the South, Mr. Walker, in 1867, became associated with the firm of Joseph Dixon and Company, of Jersey City.

In 1868, when Joseph Dixon and Company became incorporated as the Joseph Dixon Crucible Company, he was made secretary of that corporation, and began his life-work in making known to the world the then little-known uses of carbon, graphite, of which the Joseph Dixon Crucible Company have been the best-known and most widely known exponents.

Mr. Walker served the Dixon Company as secretary and largely as manager until 1891, when he was unanimously elected to the dual position of vice-president and treasurer, the latter office having been held by him for some time previous. He held these offices without interruption until his death, the general management of the company also being largely in his hands.

He was shrewd, energetic and liberal-minded, and greatly enjoyed a good joke and plenty of fun in its place. Nothing escaped his eye. He had decided literary tastes and could put them to the test any day, either for business-purposes or for an ethical cause.

Untiring and persistent devotion to business, however, with increasing age and lack of needed rest and recreation, began to tell on his vigor and strength, and on April 24 he went home for what he and his intimates supposed would be a few days' rest. Complications set in, and a month later he was at rest forever.

## FRAUDULENT PRIZE-COMPETITIONS

ENCOURAGED by the success attending the photographic prize-contests conducted by photographic journals and some of the monthly illustrated magazines, numerous publications of doubtful responsibility, as well as individuals without means or reputation, are actively trying to obtain photographic prints in a similar way. These indiscriminate attempts to deprive innocent and unwary camerists of the choicest fruits of their labors, in return for money-prizes which, though attractively advertised, are never intended to be awarded, are methods which may safely be termed criminal. It is obtaining goods under false pretenses. The sooner this practice is stopped, the better.

It is the duty of every publisher of a respectable publication to not only refuse each and every advertisement of a prize-offer which is not honestly conducted, or which emanates from parties that have no standing in the business-world, but to expose the frauds in the columns of his paper. Several advertisements of this character have been received by the publisher of PHOTO-ERA, but were promptly turned down. Among them was one quite plausible in appearance and very alluring from the pecuniary view-point. It came from a real-estate firm in Michigan.

Fortunately, the worker who desires to participate in a competition creditable in every way will not need to look far. *The Youth's Companion*, with commendable energy, discernment and liberality, announces in the pages of the current issue of PHOTO-ERA the plans of its twelfth annual prize-competition. A feature of the regular annual convention of the Photographers' Association of New England, at Boston, August 27 to 29, is a solid gold medal in the Grand Portrait-Class, open to the workers of the world. Among the photographic magazines — we blush to state the fact—is PHOTO-ERA, with the popular monthly contest of the Round Robin Guild and its own yearly competition, advertised elsewhere in this issue.

## LAW AGAINST SNAP-SHOTS IN GERMANY

THE snap-shot photographer in Germany is threatened with extinction after July 1, owing to the great risk he will run of being mulcted in heavy fines under the act which goes into force on that date. The right of all persons to the exclusive reproduction of their own portraits or those of their houses or belongings is made absolute by the new enactment.

## $1,500 IN CASH PRIZES

### A NOVEL PHOTOGRAPHIC ADVERTISING-CONTEST THAT IS OPEN ONLY TO THE PROFESSIONAL

WE make the first prize in our Photographic Advertising-Contest $1,000 because we want to prove to the world that there are men who can furnish us with photographs that are better, from an advertising standpoint, than anything that can be drawn.

Photography is already taking an important part in advertising. Every issue of the great magazines shows how the advertiser is making use of photography in exploiting his wares. But there are undeveloped possibilities. In advertising there is work for both the portrait photographer and the commercial photographer. The man who has a patent churn turns to the commercial photographer for a picture of that churn, but in developing his business he is likely to turn sooner or later to the portrait photographer for a picture of an attractive girl operating that churn. For the professional photographers who can combine good, clean photographic work with an advertising-idea there is good business at their own price.

For the double purpose of demonstrating the possibilities of photography in advertising and at the same time securing for ourselves a series of superior pictures to be used in our Kodak advertising, we are offering Fifteen Hundred Dollars in cash under very simple conditions.

The work will, we believe, prove interesting to every lover of the art and is likely to prove profitable by leading up to a new and as yet uncultivated field. Besides, the prizes are worth while.

#### TERMS

1. Each picture is to contain a figure or figures and is to be suitable for use as an illustration in advertising the Kodak or the Kodak system of amateur photography.

2. Each entry to consist of three pictures 8 x 10 or larger.

3. *Prints only* are to be sent for competition — not negatives.

4. Prints must be mounted but not framed. (Mounts should show about one-inch margin.)

5. No competitor will be awarded more than one prize. (This does not prevent a competitor from entering as many pictures, in sets of three, as he may desire.)

6. Due and reasonable care will be taken of all non-winning prints and, barring loss or accident, they will be returned to their owners at our expense, but we assume no responsibility of loss or damage.

7. The negatives from which all prize-winning prints are made are to become the property of the Eastman Kodak Co., and are to be received by it in good order before payment of prize-money is made.

8. Contestants who are awarded prizes must also furnish to us the written consent of the subject) in the case of a minor, the written consent of a parent or guardian) to the use of the pictures in such manner as we may see fit in our advertising.

9. All entries should be addressed to EASTMAN KODAK CO., Advertising Department, Rochester, N. Y.

10. In sending pictures, mark the package plainly, "Photo-Advertising Contest," and in the lower left-hand corner write your own name and address. Then write a letter as follows:

*I am sending you to-day by* $\frac{express}{mail}$ *charges prepaid,.....prints. Please enter in your Photo-Advertising Competition.*

*Yours truly.*

.....

.....

11. The name and address of the competitor must be legibly written on a paper and enclosed in a sealed envelope in the same package in which the prints are forwarded. There is to be no writing on prints or mounts.

12. We will promptly acknowledge the receipt of pictures, and when awards are made will send each competitor a list of prize-winners.

13. Only recognized professional photographers conducting a studio will be allowed to compete.

14. This contest will close Nov. 1, 1907.

#### PRIZES

First prize .....$1,000.00
Second prize ..... 500.00

#### THE JURY OF AWARD

As photographic excellence and advertising value are both features of importance, it has been our endeavor to secure, as judges, men who are recognized as among the leaders in their respective lines. In this we have been fortunate, and we are pleased to be able to announce that the following-named gentlemen have consented to act: Mr. Geo. H. Hazen, Mr. Pirie MacDonald, Col. Theodore C. Marceau, Mr. Henry D. Wilson, Mr. E. W. Spaulding.

To the photographers of America Colonel Marceau and Mr. MacDonald need no introduction. In the business end of the publishing world the other gentlemen are likewise well known. Mr. Spaulding is advertising director of *The Ladies' Home Journal* and *The Saturday Evening Post*, Mr. Wilson directs the advertising end of *The Cosmopolitan*, Mr. Hazen of *The Century*. All of them are ripe in experience — progressive. They are just the kind of men to weigh accurately the advertising value of an idea.

#### SUGGESTIONS

The jury will be instructed to award the prizes to those contestants whose pictures, all things considered, are best adapted to use in Kodak advertising.

As reproductions of the pictures will often be in small size, too much detail should not be introduced.

Pictures for reproduction should be snappy — vigorous, for they lose much by the half-tone process.

Where apparatus is introduced, it should be up-to-date. If you have n't the goods, you can borrow. There may be possibilities in introducing the Kodak Tank Developer idea.

A girl? If she is attractive, refined, by all means, yes — unless you think you can better impress the judges in some other way.

It is highly probable that we shall want to secure some negatives aside from the prize-winners. In such cases special arrangements will be made.

EASTMAN KODAK CO.,
Rochester, N. Y.

## MRS. W. W. PEARCE'S CAMERA

THE great popularity enjoyed by child-life photography is attested by the fact that many inquiries have been received regarding the character of apparatus used by Mrs. W. W. Pearce, the well-known expert in that delightful branch of photography. From personal knowledge we are able to state that she uses a 5 x 7 Tourist Graflex, fitted with a Cooke Anastigmat lens.

## NECROLOGY

### OTTOMAR ANSCHÜTZ

MAY 30, 1907, another member of the old guard of photographers has passed away — a man who has contributed very materially to the general recognition and standing of the art. The name of Ottomar Anschütz is intimately associated with the development of modern photography; and even if, in the course of the rapid advance of scientific and artistic photography, one may lose sight of his epoch-making, high-speed photographs, Anschütz was classed, until his death, among the best-known workers of Germany. What distinguished his achievements particularly is the fact that his photographs preserve their individual character in spite of their pronounced pictorial effect. His pictures were the first which were accorded a fully-merited place, side by side with paintings, in a public art-exhibition, and the applause which he received on that occasion, in the year 1899, in the Society of Artists of Berlin, was justly regarded not only as an important success for himself, but for photography as well. Wherever the progress of photography is mentioned, whether in scientific circles, among manufacturers, or professional or amateur workers — everywhere the name of the deceased will be referred to with respect, for he certainly has rendered valuable service in the interest of photography.

## AMERICAN FEDERATION OF PHOTOGRAPHIC SOCIETIES

THE summer season is upon us, and little news can be gleaned from the various photographic societies, with the exception of the large professional bodies, which hold their annual conventions about this time. Most of the photographic clubs hold no regular meetings during July and August.

Reports from the various clubs indicate that the total attendance at the Third American Photographic Salon was greater than that of the first or second.

The current Salon closes this month [July] in Pittsburg, but the prospects of a very large attendance are not encouraging, on account of the fact that the Salon comes rather late this year, and at a time when many of the people interested are out of town.

It is the cause of sincere regret that the Third Salon was not exhibited in any of the Eastern cities. All of the officers are back at their desks and hard at work on the Fourth Salon, the prospects for the success of which are extremely bright. The officers and various clubs are working in harmony, and only excellent results from their efforts are anticipated.

Among the most recent accessions to the Federation are the Wisconsin Camera Club of Milwaukee and the Indianapolis Camera Club, both of which are alive and active, a circumstance that has been noted in the pages of PHOTO-ERA more than once. It is almost certain that one or two Eastern cities will exhibit at the Fourth Salon, as several are in communication with the Federation officers on the subject.

A significant fact in connection with Federation matters is that the Middle West is the most active of all sections at the present time, and the clubs there are strong and loyal.

Announcements and entry-blanks for the Fourth Salon were sent out more than two months ago, and still requests for the same are daily coming in, not only from every portion of the United States and Canada, but from all parts of the civilized world. This great and unexpected demand for information has necessitated the printing of an extra supply. Clubs and individual workers can obtain entry-blanks and other information connected with the Salon from the secretary, W. E. Strayer, 1120 Wood St., Wilkinsburg, Penn.

## THE NATIONAL ACADEMY

ALTHOUGH the fate of the formation of a National Academy of Photographers does not altogether depend upon the action that may be taken at the National Convention — taking place at Dayton, O., August 6–9, the time PHOTO-ERA goes to press — it is to be borne in mind that the movement includes, besides professional practitioners, workers ordinarily termed semi-professionals, men and women who have gained legitimate renown in portraiture, genre and pictorial work. This class of workers is not in evidence at the meetings of the regular professionals, but, for reasons of convenience or modesty, call it what you will, is disposed to affiliate with the various organizations composed chiefly of amateurs. *The Photographer* of June 18 has the correct view of the Academy idea, maintaining that American photographers are not yet ready for the scheme.

## BOOK REVIEW

HANDBOOK OF AMERICAN INDIANS, NORTH OF MEXICO. Edited by Frederick Webb Hodge. Bulletin 30, Part One, A–M. Bureau of American Ethnology, W. H. Holmes, Chief, Smithsonian Institution, Washington, D. C.

This comprehensive and reliable work on the

subject of the American Indians, which has been in preparation for a number of years, has made its appearance. It is not too much to say that it is a monument to modern scientific and historical research, and reflects all possible credit on the mind that grasped the import and extent of the subject and guided it to completion. The handbook, necessarily voluminous, contains a descriptive list of the stocks, confederacies, tribes, tribal divisions and settlements north of Mexico, accompanied with the various names by which these have been known, together with biographies of Indians of note, sketches of their history, archæology, manners, arts, customs and institutions, and the aboriginal words incorporated into the English language — all arranged alphabetically.

It will be readily seen that every one interested in the history of the noble Red Man will turn to this volume, and the one succeeding, with a feeling that as a source of information, at once accurate and authoritative, this work, carried on by competent men under the auspices of the United States Government, is certainly without a peer.

## GAMES OF THE NORTH AMERICAN INDIANS

THE twenty-fourth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, at Washington, D. C., by W. H. Holmes, chief, is devoted to an extended memoir on the games of the American Indians, by Stewart Culin.

Any one familiar with the character of the Indian — a knowledge gained from personal contact with numbers of the race or from the perusal of the imperishable works of James Fenimore Cooper, and, perhaps, extended by an examination of the photographic character-studies by E. S. Curtis — will be slow to associate with the grave and solemn bearing of the American aborigines a sportive disposition. The snake-dance and the ghost-dance are but purely religious ceremonies; the element of merriment does not enter into them. But the American Indian is fond of diversion and entertainment; his thoughts are not always centered upon sanguinary conflicts, raids and hold-ups. The work of Mr. Culin, therefore, is not only a comprehensive and carefully prepared demonstration of the Indian's fondness for sports and games, but a revelation of their extent, variety and interest. Mr. Culin divides the games of the American Indians into two general classes, games of chance and games of dexterity. Games of pure skill and calculation, such as chess, are entirely absent. There is no evidence that any of the games described in this work were introduced into America at any time before or after the Conquest. On the other hand, they appear to be the direct and natural outgrowth of aboriginal institutions in America. Playing-cards and, probably, the simple board-game — called by the English "Nine Men's Morris"—are among the few games borrowed by the Indians from the whites. It is to the American Indian that we are indebted for lacrosse, racket and shuttlecock.

The work of Mr. Culin is the result of accurate and conscientious observation and scientific research, and forms a priceless addition to the records that are being accumulated relative to the history of a dying race. There are over eleven hundred illustrations, many of them taken from original photographs.

THE AUTOMOBILIST ABROAD. By Francis Miltoun. Numerous illustrations by Blanche McManus. 8vo, cloth, gilt top, price, $3.00 net. L. C. Page & Company, Boston.

This handsome and timely volume, written from the viewpoint of the automobilist, will be received with enthusiasm by the great army of devotees of the most popular of sports. The conventional European guides are notoriously unreliable and unsatisfactory, and the "autoist," planning a tour abroad, will find this new, silent guide a sure and practical aid. The author treats the subjects of the automobile proper, travel, hotels, roads and routes, regulations, together with other important matter, with admirable clearness and authority. All necessary information and data pertaining to the comfort and safety of the "autoist" *en tour* are clearly set forth. The large road-map of France, Belgium and the Rhine, complete and up-to-date, is a valuable feature of the book. The descriptions of tours along the highways of England, Scotland, France, Holland, Belgium and along the Rhine — disclosing views and scenes unfamiliar to the ordinary tourist — are full of interest, amusing and instructive, and bear the stamp of the observant and experienced traveler. Mr. Miltoun's volume appeals irresistibly to every person fond of foreign travel, and, if he have not an automobile — well, he will be anxious to get one. He can, at least, hope to see a part of Europe in a touring-car, either in his own machine or as a member of a touring-party.

## AMERICAN ANNUAL OF PHOTOGRAPHY

TENNANT & WARD, of New York, advise us that they have taken over the publication of the well-known *American Annual of Photography* from its former owners and are now busy with the preparation of the 1908 volume, which will be edited by John A. Tennant. Good as the "Annual" has been in past years, the new owners desire to make the 1908 issue better than ever — more useful in its information and more attractive in its illustrations. In this they ask the coöperation of all photographers in the shape of articles dealing with photographic experiences or pictorial work of unusual interest. Correspondence or contributions for the "Annual" should be addressed to the editor of *The American Annual of Photography*, Tennant & Ward, 287 Fourth Ave., New York. As the book is made up during the summer months, contributors are urged to send their articles or pictures with as little delay as possible.

THE amateur finds in the world of moving things an ever widening field of interest. And it is here that his judgment and skill must needs be supplemented by the speed of the lens. With the famous

**Bausch & Lomb-Zeiss Tessar Lens**

one can get greater brilliance and definition than with a lens of less scope.

¶ A very interesting catalog upon request.

¶ "PRISM" IS A LITTLE MAGAZINE we publish monthly. Not a mere advertisement, but a beautifully made and printed little publication about that world of wonder and beauty seen by the lens. Send us your name and we will enter your subscription FREE

Bausch & Lomb Optical Company, Rochester, N. Y.
New York Boston Washington Chicago San Francisco

## A NEW SEED MANUAL

A NEW and instructive treatise on negative-making from the amateur's standpoint, with special reference to seed-products, has been issued by the M. A. Seed Dry-Plate Co. Although short and concise, it is a thorough working-manual for all brands of Seed plates, and treats both exposure and development for different classes of work, particular attention being given to factorial development. Copies of this booklet should be in the hands of every photographic worker, and they may be secured from the various dealers handling Seed plates or from the manufacturers direct.

## CRAMER DRY-PLATES

THE concluding portion of a private letter from Pirie MacDonald to Mr. G. Cramer speaks for itself:

" . . . In conclusion, I take pleasure in pointing to the fact that I have used your plates for over fifteen years without intermission. They still answer my purpose to the extent that I have no desire to change."

Cordially yours,

[Signed] PIRIE MACDONALD

*New York, May 25, 1907.*

## A NEW GRAFLEX CAMERA

FOLMER & SCHWING CO. of Rochester, N. Y., announce a new Graflex, which is called the Press Graflex, and which, as the name implies, is designed for the press photographer.

The Press Graflex is made in the 5 x 7 size only, and is of the non-reversible type. It will accommodate lenses of from seven to fourteen inches equivalent focus, permitting of a wide range of lenses for fine situations, or the use of long-focus lenses for track or field work. The minimum focus of lens which the Press Graflex will take is seven inches.

The tension roller is operated by a clock spring, which may be speeded up to $\frac{1}{1500}$ part of a second, or lowered to $\frac{1}{2}$ of a second. Time-exposures of any duration can also be made.

The focusing-hood is large and spacious, giving a full view of the field, with a complete eye-shield fitting the contour of the face, permitting the operator to view the image on the focusing-screen, right side up, with the greatest of ease. The camera is opened ready for focusing by pressing a small lever placed near the end of the handle, conveniently near the right thumb, when carrying the camera. The cover operating the focusing-hood is likewise opened automatically, and the construction of this cover is such that the camera may be carried ready for use while it is open.

The price of the camera without lens is $110. A complete descriptive price-list will be mailed on request.

## PHOTOGRAPHIC COMPETITIONS

THERE will be prize-contests a plenty this season, and the awards will consist of cash, silver cups, medals (gold, silver and bronze) and certificates. It is the first-named class in which the greatest interest will center, especially when it is positively known that the parties conducting the contests enjoy the confidence and esteem of the entire photographic world, and that the manner of making the awards will be on a high plane and absolutely fair. It is singularly fortunate that of the two most prominent firms announcing such competitions, one should appeal, exclusively, to the amateur, while the other interests only the professional. Thus everybody will be satisfied. The publishers of *The Youth's Companion*, of Boston, announce their twelfth annual contest in which will figure cash awards aggregating several dollars. Every *bona fide* amateur — a worker not making photography his one source of livelihood — is eligible. A full set of rules, character of awards, etc., will be mailed to any one interested. See advertisement in this issue of PHOTO-ERA.

The Eastman Kodak Company, on the other hand, has organized a competition — open only to the professional photographer — in which the sum of $1,500 will be distributed among the successful contestants. The conditions in this contest are not so exacting but that every commercial worker, with a fair degree of originality and taste, has a chance to capture one of these tempting prizes. The jury selected for this competition is one that speaks volumes for the sagacity, breadth of vision and fairness of the organizers of this splendid enterprise, the details of which will be found on page 104 of the current issue of PHOTO-ERA.

## EXPRESSIVE PORTRAITURE

"FACIAL expression is not a fixed thing. It is dependent upon the treatment of its surroundings."

"The truth that beauty is born of treatment cannot be grasped at once, nor is it easy to understand that the plainest sitter affords material as rich for pictorial beauty as does the physically perfect face or form."

"The lighting need not give anxiety to the experienced photographer, but composition should be the object of his earnest search."—*Art Principles in Portrait Photography, by Otto Walter Beck.*

This new book, by an eminent art-authority, an invaluable help to the progressive portraitist, can be had of the publishers, The Baker and Taylor Company, New York City.

## KORONA CAMERAS

THE makers of these well-known cameras have issued their 1907 catalog, which presents an attractive line of improved apparatus fitted with new and desirable devices, calculated to win quick appreciation. The Optical Section sets forth the merits of the Turner-Reich lenses, which are made according to the latest popular types, concluding with field binoculars and shutters. Wide-awake buyers and others interested should have the catalog of the Gundlach-Manhattan Optical Co., Rochester, N.Y. — sent to any one on request.

**Eastman Kodak Company**
ROCHESTER, N. Y., *The Kodak City.*

## LITTLE HELPS.

When you are packing up that vacation outfit, don't forget to include a portrait attachment for your Kodak. The scope of this little attachment is really much greater than its name implies.

As a portrait attachment you will be sure to find much use for it in portraying the quaint characters always to be found in the haunts of the vacationist. In your wanderings through the woods and fields or along the shores of stream or lake, many small but interesting forms of animal and plant life will be discovered; photographed in the ordinary way their image on the film would be too small for practical purposes. Just slip on your portrait attachment and you may focus up to within three and one-half feet with a fixed focus Kodak and up to within two feet eight inches with the others, and thus obtain a large image of the object.

The Kodak Portrait Attachment will take but a corner in your vest pocket and its cost, fifty cents, is in proportion.

Groups around the camp fire or in the ingle nook of the hunting lodge form most interesting subjects for contemplation when the pleasant vacation days have slipped into memory land.

Don't *wish* you had made negatives of these pleasant gatherings, just slip a few packages of Eastman Flash Sheets in with the rest of your duffle. They won't take up any room, won't break or spill into the mess kit and are always ready for use—just pin to a card and touch with a match, that's all there is to it.

Fascinating camp fire scenes may be made by touching off a flash sheet just in front of the camp fire, taking care only to screen the lens from the direct light of the flash.

Endless pleasant experiments with night pictures are possible with the flash sheets and the pictures thus made will go far in making your vacation collection out of the ordinary.

The cost of the flash sheets—only twenty-five cents. Ask your dealer.

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## HAS TO BE.

Eastman N. C. *has* to be the best roll film.

It is only a link in the Kodak chain of picture making and were this link in any way weaker than the other strong links, the integrity of the whole chain would be imperilled.

For business reasons, if for no other, we must manufacture the best.

Every good negative on Eastman N. C. is an advertisement for us, helps to popularize the whole plan of Kodak picture making. Let every other one of our products be absolutely perfect and the film, the picture foundation, be below par—at once every product would sink to the level of the imperfect one. We take no chances with Eastman N. C. We begin at the beginning. We nitrate our own cotton for the film base; we nitrate our own silver for the emulsion. We even make the acid with which the cotton and silver are nitrated.

Wherever it is possible to improve the completed product by manufacturing the raw material, we erect a factory and make that raw material.

Back of all this searching for imperfections is over twenty years of experience in *making film*—and the combined knowledge of the chemists who make the best dry plates in the world, and of the most expert film makers.

When you buy film, be sure "Kodak" is on the spool end.

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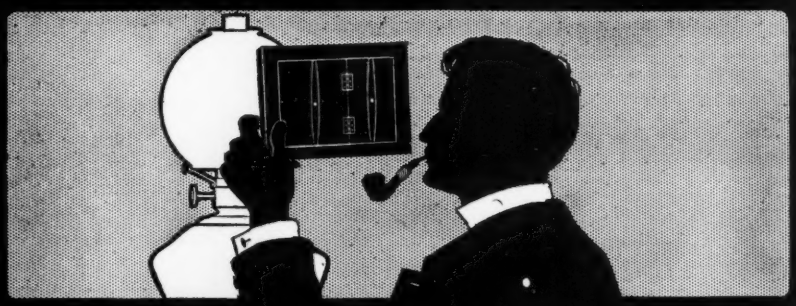
**Eastman's W. D. Platinum Paper requires only water for development. Beautiful results in black and white.**



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